

AD-A182 725 PERFORMANCE APPRAISAL INTERVIEW: A REVIEW OF RESEARCH 1/1

1/1

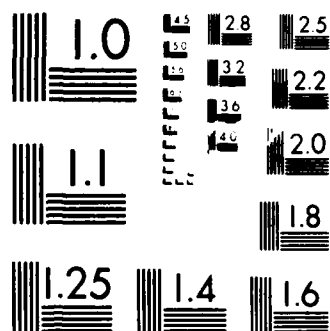
NO-A182 725 PERFORMANCE APPRAISAL INTERVIEW: A REVIEW OF RESEARCH 1/1
(U) TEXAS A AND M UNIV COLLEGE STATION DEPT OF
MANAGEMENT T BIDDLE ET AL JAN 87 TR-OMR-8

N00014-85-K-0289

UNCLASSIFIED N00014-85-K-0289 F/G 5/9 NL

NL

ENL
8-87
DTIC



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

AD-A182 725

12

DTIC FILE COPY

Human Resources Research

PERFORMANCE APPRAISAL INTERVIEW:
A REVIEW OF RESEARCH

Thomas Biddle
and
Cynthia D. Fisher

January, 1987

TR-ONR-8

Texas A&M University
and
Virginia Polytechnic Institute

DTIC
SELECTED
JUL 21 1987
S E

This document has been approved
for public release and sale; its
distribution is unlimited.

87 7 20 022

PERFORMANCE APPRAISAL INTERVIEW:
A REVIEW OF RESEARCH

Thomas Biddle
and
Cynthia D. Fisher

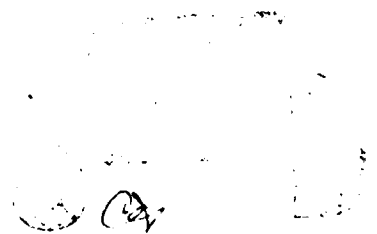
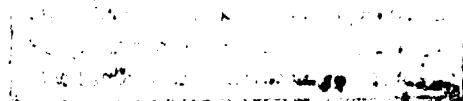
January, 1987

TR-ONR-8

Department of Management
Texas A&M University

Prepared for:
Office of Naval Research
800 N. Quincy Street
Arlington, Virginia 22217

This report was prepared for the Manpower R&D Program of the
Office of Naval Research under contract N00014-85-k-0289.
Reproduction in whole or in part is permitted for any purpose
of the United States Government.



Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER TR-ONR-8	2. GOVT ACCESSION NO. ADA182725	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Performance Appraisal Interview: A Review of Research		5. TYPE OF REPORT & PERIOD COVERED Technical Report
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Thomas Biddle and Cynthia D. Fisher		8. CONTRACT OR GRANT NUMBER(s) N00014-85-k-0289
9. PERFORMING ORGANIZATION NAME AND ADDRESS Department of Management Texas A&M University College Station, Texas 77843		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS NR-475-036
11. CONTROLLING OFFICE NAME AND ADDRESS Office of Naval Research Department of Navy Arlington, Virginia 22217		12. REPORT DATE January, 1987
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. NUMBER OF PAGES
		15. SECURITY CLASS. (of this report) Unclassified
15a. DECLASSIFICATION/DOWNGRADING SCHEDULE		
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES Supported by the Office of Naval Research Manpower R&D Program		
19. KEY WORDS: (Continue on reverse side if necessary and identify by block number) Performance appraisal, performance evaluation; feedback, evaluation interview		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The research on performance appraisal interviews (PAI) is reviewed and critiqued. Factors affecting superior and subordinate reactions to the interview include (1) the structure of the PAI (purpose, frequency, source of appraisal, and rating format); (2) the content of the PAI (feedback sign, specificity, and performance attributions); (3) goal setting in the PAI; and (4) the process of the PAI (participation level and supervisor supportiveness). Suggestions for designing effective PAIs are given.		

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE

S N 0102-LF-014-6601

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

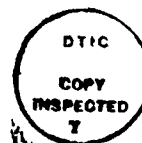
S/N 0102- LF-014-6601

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

The Performance Appraisal Interview:
A Review of Research

Few topics in the personnel and human resources management area have received as much attention as performance appraisal (DeCotiis & Petit, 1978; Landy & Farr, 1980). Much of the voluminous literature on performance appraisal has focused on improving performance appraisal systems through better instrumentation and more effective rater training. However, it has been increasingly recognized that employee reactions to the performance appraisal process are as crucial to the long term effectiveness of performance appraisal systems as the validity and reliability of the performance measures themselves. The focus of this paper is on examining employee reactions to an integral component of any organization's performance appraisal system--the performance appraisal interview (PAI).

In reviewing the previous research, four main determinants of supervisor and subordinate reactions to the PAI are posited: (1) the structure of the PAI, (2) the content of the feedback conveyed in the PAI, (3) goal setting in the PAI, and (4) the process by which the PAI is conducted. Throughout this discussion, it should be remembered that this division is largely for clarity in presentation rather than a rigid classificatory scheme. Clearly, all of these aspects of the PAI are interrelated and these interrelationships will be stressed throughout this paper.



Accession No.	
DTIC	<input checked="" type="checkbox"/>
DTIC	<input type="checkbox"/>
Unprocessed	<input type="checkbox"/>
Justification	
By	
Description	
Availability Codes	
Distribution	
Dist	Control
A-1	

Structure of the Performance Appraisal Interview

Five structural factors of the performance appraisal interview will be discussed. First, varying purposes of the interview and perceptions of how well these purposes are fulfilled will be addressed. A second, related issue concerns whether or not administrative, evaluative, and developmental purposes can or should be combined into a single interview. Finally, questions of how frequency, sources of information, and rating format used in PAIs affect participant reactions will be discussed.

Purpose

The purpose or function of the PAI, as perceived by the supervisor and subordinate, is the first structural aspect of the interview which will be examined. The two main functions of PAIs are (1) employee development and counseling, and (2) communicating administrative decisions regarding the employee (Latham & Wexley, 1981). As a developmental tool, the PAI is aimed at improving performance by identifying areas for growth and development and setting future goals or objectives in these areas. As an administrative tool, the PAI focuses on communicating performance ratings and related evaluative decisions regarding the employee including salary changes, promotions/demotions, future job assignments, etc.

Several recent studies have examined supervisors' and subordinates' desired purposes for the PAI and their perceptions of whether these purposes were accomplished. Lawler, Mohrman, and Resnick (1984) surveyed over 300 supervisor-subordinate pairs regarding the extent to which a number of possible

purposes should have been and actually were accomplished in their most recent PAI. The results of this survey indicated significant differences between supervisors and subordinates in what they desired to occur and perceived actually did occur during the PAI. Most supervisors (82%) felt that all the matters important to them were discussed during the PAI. From the subordinates' perspective, the appraisal interview clearly failed to deal with the desired areas of pay, work planning, and employee development as fully as they would have liked. Supervisors perceived that these areas were discussed at greater length during the PAI than did subordinates.

Both supervisors and subordinates agreed that the purpose accomplished to the greatest extent in the most recent appraisal was documenting subordinates' performance (i.e., communicating performance ratings and discussing why the ratings were given). However, supervisors and subordinates disagreed on how desirable this purpose was for the interview: supervisors believed that too much attention was paid to this purpose whereas subordinates believed that not enough emphasis was placed on documenting their performance (Morhman and Lawler, 1983). Both supervisors and subordinates agreed that appraisals should be used to determine appropriate pay; however, subordinates did not perceive that this actually occurred as often as supervisors did. This latter finding may be due to the supervisors' beliefs about discussing pay in the PAI. Supervisors did not believe that PAIs should be used to communicate and explain pay decisions and pay often was not discussed, contrary to the desires of subordinates.

The above research, while based on only one sample and subject to memory distortion, indicates that significant disagreements exist between supervisors'

and subordinates' perceptions of what should and actually does occur during the PAI. In particular, these disagreements suggest that the appraisal interview often fails to adequately deal with several areas important to subordinates (e.g., documenting performance, pay). However, no research has examined the impact of these unfulfilled expectations on subordinates' attitudes and behavior both during and subsequent to the interview. At a minimum, it would seem that some degree of convergence between what subordinates perceive should and does occur in the interview is needed for the interview to have a positive impact on subordinates.

Future research needs to focus on the antecedents and consequences of supervisors' and subordinates's divergent perceptions of the PAI. A positive first step to understanding the dynamics underlying these differences would be to compare supervisors' and subordinates' perceptions to observations of actual behavior in the appraisal interview. Such comparisons may indicate that supervisor-subordinate differences are largely related to the roles these two parties occupy in the traditional PAI: supervisors are the providers of appraisal-related information and are in control of the event, whereas subordinates are the passive receivers of this information (Beer, 1981). In this traditional top-down arrangement, supervisors probably conduct the interview as they perceive it should be conducted and may be largely unaware of their subordinates' perceptions of what should be and is covered in the interview. Given this arrangement, it is not surprising that supervisors are more satisfied with the PAI than subordinates (Ilgen, Peterson, Martin, Boeschen, 1981; Lawler et al., 1984).

Structuring subordinate involvement in the appraisal interview through participative techniques may be one way to increase the likelihood that subordinate expectations for the interview will be fulfilled. Subordinate participation in the PAI has been shown to increase the upward flow of information and, in turn, improve subordinates' perceptions and attitudes regarding the PAI (Burke & Wilcox, 1969; Burke, Weitzel, & Weir, 1978; Kanfer, Sawyer, Early, & Lind, 1986). With an increase in upward flow of information, it is more likely that subordinates will be able to influence the structure of the PAI so that it also fulfills their needs. The effects of increasing subordinate participation in the appraisal interview will be discussed at greater length in a later section of this paper.

Separating/Combining Functions

A second structural issue concerns whether or not it is effective to attempt to handle several interview functions in a single interview. In both the anecdotal and empirical literature, the focus in this area has been on the specific question of whether discussing salary actions has a negative impact on developmental aspects of the PAI.

Numerous sources have advised that salary discussions should be conducted separately from the developmental aspects of the appraisal interview (e.g., Beer, 1981; Meyer, Kay, & French, 1965). These writers offer three reasons why it is ineffective to use the PAI to achieve subordinate development and improve performance and, at the same time, communicate planned salary actions. First, combined interviews force the supervisor into the opposite roles of helper and judge which supposedly leads to conflict and generally unsatisfactory results.

Second, since subordinates' self evaluations are generally more positive than supervisor's evaluations, subordinates often may become defensive when the supervisor shares his/her (lower) performance evaluation while justifying salary decisions. In combined-purpose interviews, this defensiveness is seen as blocking effective subordinate development (i.e., developmental discussion and goal setting). Third, combined interviews often become salary-centered discussions which focus on past performance instead of future performance planning and goal setting.

The alternative position to separating the salary and development functions is based upon an expectancy theory formulation of work behavior. According to this formulation, combining the development and salary functions in one interview would help employees clarify their organizational role, the organizational reward system, and the link between performance and valued organizational rewards. With this increased understanding, employees' performance and attitudes toward the appraisal system should improve (Mohrman & Lawler, 1983). From this perspective, any difficulties arising from combining the development and salary functions are due to the inability of the organization to design truly contingent reward and promotion systems rather than an inherent incompatibility in these two functions (Lawler 1971).

Several studies have directly or indirectly investigated subordinates' reactions to combining or separating the developmental and salary functions in the PAI. In the renowned General Electric studies on performance appraisal, Meyer et al. (1965) examined subordinate attitudes and performance following a change from joint purpose to separate development and salary interviews. They

found improved subordinate performance and attitudes toward supervisors following the change to separate interviews. Although supportive of the argument for separate function interviews, several confounding factors make any generalizations from these results questionable. Specifically, the separate development interview differed from the joint purpose interview on several dimensions other than purpose, including the frequency with which interviews were conducted, whether summary ratings were provided, and the degree of mutual goal-setting. With these dimensions having been shown to independently influence employee attitudes and behavior (Ilgen, Fisher & Taylor, 1979; Locke, Shaw, Saari & Latham, 1981), no firm conclusions can be drawn from this study regarding whether the positive results were due solely to separating the salary and development portions of the interview.

Cummings (1973) examined subordinate reactions to performance appraisal systems which either separated ("the old system") or combined ("the new system") the development and salary functions. Results of this study showed that employee perceptions of the appraisal system overall and the linkage between the appraisal system and pay were more positive with the new joint function performance appraisal system. However, several confounding factors in this study again prevent any conclusions about the effects of separating or combining interview functions. Namely, the new performance appraisal system not only combined the salary and development functions but also involved changes in locus of reward power, frequency, amount of feedback, and the involvement of employees in decision-making regarding the performance appraisal system.

Burke, Weitzel and Weir (1978) investigated the relationship between subordinates' perceptions of the importance of their appraisal for future rewards and several interview process and outcome variables. In a civil service organization where no rewards were officially tied to performance reviews, Burke et al. (1978) found that subordinates who viewed the PAIs as more instrumental for organizational rewards (e.g., pay, promotion, work assignments) reported more goal-setting, motivation to improve, and satisfaction with the interview. One interpretation of these results is that although officially no rewards were tied to performance reviews, superiors who attempted to tie rewards under their control to performance reviews had more satisfied and motivated subordinates. An alternative interpretation of these results is that more satisfied and motivated subordinates (for whatever reason) perceive a stronger link between the PAI and organizational rewards. Although either interpretation is plausible, no causal conclusions can be drawn from this data due to the correlational nature of the research.

Prince and Lawler (1986) recently investigated the impact of discussing salary on several interview content (e.g., goal setting), process (e.g., participation), and outcome (e.g., satisfaction) variables. In this study, questionnaire data on whether or not pay was discussed in the PAI and on the above interview characteristics were collected from subordinates either: (1) before and after their annual PAI or (2) only after their annual PAI. Correlational analyses indicated that discussing salary in the interview was not directly related to the interview outcome variables (i.e., to perceived utility of and satisfaction with the interview). Instead, path analyses revealed that

salary discussions had an indirect positive impact on these variables by increasing subordinate goal setting and participation in the PAI. Furthermore, it was found that the indirect positive effects of discussing salary were strongest: (1) when the supervisor and subordinate disagreed in their assessments of subordinate's performance prior to the interview, and (2) with low performing subordinates.

The results of Prince and Lawler's study do not support the argument that discussing salary has a negative impact on the developmental aspects of the PAI. Rather, these data support the competing position, especially in those conditions where discussing salary would be predicted to have its most negative impact (i.e., with low supervisor-subordinate agreement and low performance).

However, this study is not without weaknesses which should be noted. First, as with the previous research, the correlational nature of this study leaves its results open to multiple causal interpretations. For example, it could be that when supervisors are participative, subordinates feel freer to bring up salary issues. Relatedly, because the extent to which salary was discussed in the PAI was just measured (rather than being experimentally assigned), one must wonder why some supervisors discussed salary issues and others did not. Identifying the causal antecedents of whether salary (or other issues) is discussed in the PAI might be an interesting topic for future research. Another limitation of this study (and area for additional research) is the level of agreement between supervisors and subordinates on the extent to which salary was discussed. Although there was some agreement between supervisors and subordinates on the extent to which salary was discussed in the

interview ($r = .17$ before-after sample; $r = .27$ in the after only sample), there is a large amount of unexplained variation in this relationship.

Given these limitations, Prince and Lawler present several speculative explanations for why discussing salary may have a positive impact on the PAI. First, discussing salary may increase the amount of useful information transmitted in the PAI. Specifically, discussing salary may prod supervisors to be more prepared and provide more specifics in order to back up salary decisions. Further, discussing salary may communicate to subordinates which aspects of performance are really valued and therefore reduce the ambiguity surrounding being evaluated by unclear or unknown criteria.

Second, discussing salary may energize the PAI. That is, salary discussions in the interview may lead subordinates to take the PAI more seriously and therefore increase their involvement in the session. Whether or not this increased involvement is positive would depend largely on the supervisor's skills at conducting appraisal interviews.

A third possible reason for salary discussions having a positive impact on the PAI comes from the research on goal setting. Discussing salary actions in the context of the subordinate's past performance could help create the perception that pay is contingent on performance. Research on goal setting (Locke, et al., 1981) suggests that presenting a monetary incentive leads to higher spontaneous goal setting, goal commitment, and performance. The finding from this study that more goal setting occurred when salary was discussed in the PAI supports this idea.

Finally, the positive effects of discussing salary may be related to the supervisor's skills at conducting PAIs. Perhaps some individuals are just better at conducting appraisal interviews and do a thorough job, including discussing both salary and developmental issues. In contrast, other individuals may not be as skilled at conducting interviews and therefore may only cover some areas or may cover many areas poorly.

As the previously discussed studies indicate, present empirical understanding of how to structure several interview functions in one or more interviews is quite limited. Given the weaknesses of this research, several suggestions for future research appear to be warranted. First, researchers need to observe the actual behavioral exchanges between supervisors and subordinates in the interview setting. Without observations of actual behavior, it is doubtful whether understanding of the processes occurring in the PAI will increase. To date, only two studies have measured the actual behavior of supervisors and subordinates in the PAI (Kay, Meyer, & French, 1965; Metcalfe, 1984). Clearly, more research needs to take this approach, since supervisors' and subordinates' perceptions of what occurs in the PAI often differ.

Second, past research has narrowly focused on the specific question of whether to separate or combine the salary and development functions. However, the broader issue this research appears to be whether the evaluative components of the appraisal interview, be they performance ratings, salary issues, or promotion decisions, positively impact the developmental aspects of the PAI. By focusing on this broader issue, future research will be more likely to examine the processes underlying the question of whether the salary and development

functions should be separated or combined. For instance, why and under what circumstances does evaluative feedback produce defensive hostility versus desire to learn and improve?

Finally, research in this area needs to take into account the realities of organizational life. For example, researchers should recognize that it is doubtful whether superiors ever completely separate the developmental and evaluative aspects of the PAI for two reasons. First, it is difficult for supervisors to give developmental feedback and set performance goals without implicitly or explicitly referencing the subordinate's past performance (Prince & Lawler, 1986). Secondly, developmental feedback and goals may almost always be perceived as having evaluative implications because they most often come from a source (i.e., the supervisor) who has authority over the subordinate and controls informal and formal rewards. By recognizing these realities of organizational life, future research will hopefully move from a "one best way" approach to examining under what conditions the developmental and evaluative components should receive differential emphasis.

A contingency model of performance appraisal developed by Cummings and Schwab (1973) is suggestive of the direction this type of research could take. Cummings and Schwab propose three types of appraisal systems (developmental, maintenance and remedial), whose functions are contingent on the nature of the job, the potential for goal-setting, and performer characteristics. Under this approach, developmental appraisals would be used for high performing, high potential employees in discretionary jobs where goal-setting and performance enhancements can take place. Most other employees would be evaluated by a

maintenance appraisal. These employees have performed at a satisfactory level for some time and are not likely to improve their performance because of limitations on ability, motivation, and the nature of their job. These subordinates' appraisals would focus on maintaining performance at currently acceptable levels and on dealing with exceptions to established performance patterns. Serious exceptions would be handled by the third system--remedial appraisals. These appraisals would be used for low performing or consistently marginal subordinates in an attempt to raise performance to acceptable levels. Cummings and Schwab suggest that their contingency model of appraisal deals with both the developmental and evaluative functions insofar as the first appraisal type (developmental) is primarily developmental, the second type (maintenance) is mainly evaluative, and the third type (remedial) both developmental and evaluative.

Another potentially useful approach to dealing with the various functions of the appraisal interview has been proposed by Kane and Lawler (1979). They suggest increasing the frequency of combined developmental and evaluative interviews during each appraisal period. These sessions would eventually be followed by an interview focusing on administrative decisions (e.g., pay changes, promotions/demotions) which would be based on the aggregate of all combined developmental and evaluative appraisals during the period. Kane and Lawler suggest that this sequential method of conducting PAIs would minimize employee surprise and possible resentment about administrative decisions and provide more opportunity for development.

Frequency

A third structural issue is how often appraisal interviews should be conducted. The annual PAI seems to be the norm in most American organizations. However, there are several indications that PAIs may occur less frequently, at least from subordinates' perspective. Meyer et al. (1965) found that many supervisors did not conduct PAIs unless strict control procedures insuring their occurrence have been established. In addition, research by Hall and Lawler (1969) suggests that supervisors and subordinates may have different conceptions of what constitutes a PAI. They found that when interviewing supervisors and subordinates separately regarding their PAIs, supervisors reported conducting regular appraisal interviews but subordinates did not perceive that interviews had taken place. These data from supervisors and subordinates indicated supervisors considered brief, general discussions with subordinates as PAIs, but subordinates did not.

Although most employees desire more feedback than they are currently receiving (Ashford & Cummings, 1983), present empirical knowledge of the desirability of more frequent PAIs is sparse. Landy, Barnes, and Murphy (1978) reported that subordinates evaluated at least once a year viewed the interview as more fair and accurate than subordinates evaluated less frequently. However, these results do not necessarily indicate that interviews conducted more than once a year would result in still more positive subordinate reactions.

The frequency with which PAIs might most effectively be conducted depends on a number of factors including the function of the interview, the nature of the work environment, the task(s) performed, and the characteristics of the

supervisor and subordinate. Developmental PAIs, particularly for subordinates in discretionary non-routine jobs where goal-setting is involved, should be conducted relatively frequently (McConkie, 1979). Although more than annual developmental interviews are suggested, it is recommended that the intervals between interviews be flexible depending on the job and feedback available in the work environment regarding goal progress (Hanser & Muchinsky, 1978). Cummings and Schwab (1978) suggest that maintenance appraisals, appropriate for satisfactory subordinates in routine jobs, be conducted less frequently--annually or as warranted by exceptions.

Several sources suggest highly frequent reviews with low performers. Cummings and Schwab (1973) believe intensive (weekly and possibly daily) sessions are required with low performers to raise performance to acceptable levels. Research by Kay, et al. (1965) and Burke, et al. (1978) supports conducting more frequent PAIs with low performers. Kay et al. (1965) found an "overload phenomenon" of subordinate defensiveness in the appraisal interview: as the number of critical statements by the supervisor increased, subordinate defensiveness and experienced threat increased at an accelerating rate. Burke et al. (1978) have found that the greater the threat experienced by the subordinate during the appraisal interview, the less he/she looked forward to future interviews, perceived the interview as fair, was satisfied with the interview, and wanted to improve performance. One way of managing these negative reactions would be to increase the frequency of PAIs. By conducting more frequent sessions the number of criticism and the experienced threat per session should decrease, which might reduced the tendency for subordinates to be overwhelmed by criticism in a given session.

From a different perspective, Arvey and Jones (1985) propose that punishment will be most effective if delivered immediately after an undesirable response. Considering that PAIs may be perceived as somewhat punitive for many low performers, improved performance may result from more frequent sessions.

In addition to performance level, another characteristic of subordinates relevant to the frequency of appraisal interviews is tenure. Newcomers to an organization need more frequent interviews than do long-term employees, to clarify what is expected of them and how they are doing (Kane & Lawler, 1979). It seems to be standard practice in some organizations to conduct more frequent interviews for new employees.

It should be clear from the above discussion that determining how often PAIs should be conducted requires more thought than it has been commonly accorded. This discussion has probably only touched on the domain of factors that should be considered in making this determination. Nevertheless, even at the present state of knowledge, it can be concluded that the frequency of PAIs is an important influence on supervisors' and subordinates' interview-related attitudes and behavior.

Future research on the frequency of appraisal interviews needs to proceed in a number of directions. First, questionnaire data from supervisors and subordinates, separately indicating their preferences for how often interviews are conducted, would be useful. Second, field experiments which examine supervisors' and subordinates' attitudinal and behavioral reactions to manipulating the frequency of interviews are needed. With recent research suggesting that increasing the frequency of feedback does not always yield positive results (Chhokar & Walin, 1984), there probably comes a point at which

highly frequent PAIs elicit negative reactions from both supervisors and subordinates.

For subordinates, overly frequent interviews which provide redundant information may threaten subordinates' perceived freedom to do their job in their own way. Research on "psychological reactance" (Brehm & Brehm, 1981) suggests that when individuals' freedom of choice is threatened they often react in dysfunctional ways to reassert their control. Increasing the frequency of PAIs may also have dysfunctional effects on supervisors. Numerous anecdotal and empirical articles suggest that many supervisors dislike appraising and giving feedback to subordinates (Fisher, 1979; Larson, 1984; McGregor, 1957). Therefore, increasing the time supervisors must spend conducting an undesirable task may have negative repercussions in the form of decreasing supervisors' satisfaction with the appraisal system and their motivation to appraise and give feedback to subordinates (Fisher & Thomas, 1982).

Finally, future research needs to consider how the frequency of interviews interacts with other factors (e.g., the function of the interview, nature of the job and work environment, characteristics of the subordinate, etc.) in influencing supervisors' and subordinates' reactions to the interview. For example, there needs to be synchronization between the appraisal period and the point at which performance can be reliably and effectively evaluated. This point may seem obvious, but the natural cycle of the tasks performed is often not considered in determining how frequently to conduct PAIs.

The fourth structural topic to be discussed is how the source of the appraisal information influences supervisors and subordinates' reactions to the PAI.

Sources of Appraisal Information

The source of the appraisal information generally creates attitudinal and behavioral effects which are confounded with the effects created by appraisal content. Theoretically, a distinction can be made between the individuals who judge performance and the individual who feeds back this information to subordinates. However, in practice subordinates' immediate supervisor most often fulfills both these roles. It has been estimated that 95% of the appraisals conducted at lower and middle management levels are based upon information both generated and communicated by subordinates' immediate supervisors (Lazer & Wikstrom, 1977).

Any discussion of how employees react to receiving formal performance feedback from supervisors needs to recognize that subordinates proactively monitor and seek feedback from a variety of sources in the work environment (Ashford & Cummings, 1983; Hanser & Muchinsky, 1978). Greller and Herold (1975) postulate five sources of feedback available to subordinates in the work environment: the formal organization, the immediate supervisor, coworkers, the task, and the self. These researchers found that employees reported getting performance-related information from each of these sources and that generally the informativeness of these sources decreased as one moved from psychologically close (i.e. the self or task) to psychologically distant (i.e., formal performance appraisal) sources. Research by Greller (1980) also indicates that supervisors not only overestimate the importance of the feedback they provide to subordinates, but also underestimate the value subordinates place on feedback from sources under their own control (e.g., the task, comparisons to the work of

others, etc.). Furthermore, supervisors perceive that more feedback exists in the work environment than do subordinates (Ilgen, Peterson et al., 1981).

Given these disagreements, supervisors often may not be perceived as a psychologically close source of feedback and hence may not be the most salient source for influencing subordinate motivation and performance. This contention has been supported in several studies. DeNisi, Randolph, and Blencoe (1983) found that peer feedback had a greater effect on perceptions of group performance and motivation than did supervisory feedback. Similarly, Pavett (1983) found that feedback from patients and co-workers had a greater impact on nurses' perceptions of the link between delivering high quality patient care and valued outcomes than did supervisory feedback. Ivancevich and McMahon (1982) found that self-generated feedback on goal accomplishment was superior to supervisory feedback in improving performance, intrinsic job satisfaction, and organizational commitment.

Subordinates' assessments of their supervisors' credibility as an appraisal/feedback source appear to be an important influence on how subordinates react to supervisory feedback in the appraisal interview (Ilgen, Fisher, & Taylor, 1979). Landy et al. (1978) found that subordinates who perceived their supervisor as more knowledgeable about their job and performance saw the appraisal interview as more fair and accurate than subordinates who regarded their supervisor as less knowledgeable about their job and performance. As Ilgen, et al. (1979) concluded from their review of feedback in organizations, sources of feedback must be knowledgeable of the recipients, tasks, and performance for feedback to be perceived as accurate and accepted. Research by Ilgen, Peterson, Martin, and Boeschen (1981), however, indicates that supervisors and subordinates differ in the extent to which they believe

supervisors actually possess this knowledge. They found that supervisors, relative to subordinates, overestimated the extent to which they had a thorough knowledge of their subordinate's job.

A related dimension important in influencing the supervisor's credibility is his/her perceived expertise. Stone, Gueutal & McIntosh (1984) showed that feedback from supervisors with high expertise was perceived as more accurate than feedback from low expertise supervisors. They also found that the supervisor's expertise interacted with the order in which positive and negative feedback was presented in the interview. If the supervisor had low expertise, the order in which feedback was presented had no impact on perceptions of feedback accuracy. However, when the supervisor was perceived to have high expertise, a positive then negative sequence was perceived as more accurate than a negative then positive sequence.

A third dimension related to assessing the supervisor's credibility as an appraisal/feedback source is trust. O'Reilly and Anderson (1980) found that subordinates' trust in their supervisor moderated the relationship between the provision of accurate and relevant feedback and job satisfaction and performance. Interestingly, these results indicate that accurate and relevant feedback is associated with increased satisfaction and performance when subordinates do not trust their supervisor. When a high trust relationship exists between the supervisor and subordinate, satisfaction and performance appear to be due to other factors than the provision of high quality feedback. In addition, Ilgen, Peterson et al. (1981) have shown that subordinates who trust their supervisor have more positive perceptions of the appraisal session atmosphere than subordinates who do not trust their supervisor.

Findings from these studies indicate that subordinates assess the credibility of their supervisor as an appraisal/feedback source and that these perceptions moderate their reactions to the appraisal interview. Several studies indicate ways in which supervisors may increase their credibility as feedback sources. These include: (1) adequately sampling subordinates' behavior before giving feedback, (2) assuring that there is agreement between the organization's and employees' standards, (3) displaying a willingness to help subordinates improve their performance, and (4) considering subordinates' effort as well as the results achieved when evaluating performance (Dornbusch & Scott, 1975; Landy et al. 1978; Morran & Stockton, 1980).

Despite the pervasive reliance on supervisors as the sole appraisal source, there are several reasons why other sources should be utilized whenever possible. First, supervisors often do not have adequate opportunities to observe subordinates because of the number and variety of their other supervisory responsibilities. In addition, the subordinate's job may require work that simply is not visible to the supervisor. Under these conditions of limited observation, it seems likely that subordinates would be able to maximize their supervisor's impression of them by performing their best only on those occasions when they know they are being observed (Kane & Lawler, 1979).

Second, even if the supervisor's observational opportunities are increased, this may not have the intended positive results. More detailed and/or frequent performance monitoring may negatively impact the supervisor-subordinate relationship in other ways. Studies by Strickland (1958) and McFillen (1978) reveal that increasing the closeness of supervision leads supervisors to trust

their subordinates less and to believe that continued close supervision is necessary to maintain performance. If subordinates perceive more detailed and frequent performance monitoring as signaling a lack of trust by their supervisor, a self-fulfilling prophecy may develop in which low trust and and close supervision lead to untrustworthiness and a real need for continued close supervision (Fisher & Thomas, 1982).

Finally, even if supervisors are knowledgeable of their subordinates' performance, subordinates' regard for appraisal information from their supervisor needs to be considered. Research by Greller and his colleagues (Greller, 1980; Greller & Herold, 1975) has shown that subordinates consider most other sources of performance-related information (e.g., the task, coworkers) as more useful and informative than information from their supervisors. These findings underscore the need to incorporate other appraisal sources either formally or informally into the appraisal process.

Obtaining appraisal information from multiple sources has been recommended as a more thorough method of appraisal than the "immediate supervisor" approach, especially for employees in nonroutine jobs (Kane & Lawler, 1979; Keeley, 1978). While much research has focused on the psychometric properties of the information obtained from these sources, little is known about how supervisors and subordinates react to having nontraditional sources involved in the appraisal process. More research is needed to examine how supervisors and subordinates react to using coworkers and outside individuals as sources of appraisal information. This is an interesting topic for future research because it involves examining what happens when previously

informal feedback sources are institutionalized as formal sources (Herold & Parsons, 1985). As informal sources, coworkers and outsiders may be specially valued because they have a greater observational opportunities than supervisors and also do not carry the threat of reward, punishment, or surveillance. However, when information from coworkers and outsiders has formal evaluative and control implications, supervisors' and subordinates' reactions to these sources may change. For some supervisors, utilizing other sources of appraisal information may be a welcome relief because it lightens an undesirable task. However, other supervisors may not welcome the use of nontraditional sources if it is perceived as undermining one of their legitimate bases of power and control over subordinates. Furthermore, subordinates may not like appraising their coworkers because of the negative interpersonal repercussions of giving low ratings to peers (DeNisi et al. 1983). In addition, subordinates may not like receiving appraisals from coworkers. This is because peer evaluations, especially when negative, may be more threatening to subordinates because they come from a source whose credibility is harder to deny.

If multiple sources of appraisal information are used, the question arises regarding who should actually participate in interview. One approach would be to have all appraisal sources participate and provide feedback so that conflicting expectations and information could be clarified (McConkie, 1979). Another approach would be to have only the supervisor and subordinate present, with the supervisor transmitting feedback from various sources. This latter approach may reduce subordinate defensiveness because it would slant the supervisor's role from judge to interpreter.

Rating Format

The final structural factor to be discussed is rating instrument format. The majority of research on appraisal techniques has focused on the psychometric aspects of the various rating formats. In contrast, few studies have examined how rating format influences the nature of the interview and subsequent perceptions, attitudes, and behavior.

Many authors have suggested that appraisal interviews be based on performance goals rather than on traits. In line with this suggestion, research has shown that subordinates often have more positive attitudes toward goal-oriented management by objective (MBO) appraisals than toward trait-centered appraisals. Several studies also indicate that both supervisors and subordinates react more positively to appraisal interviews which focus clearly on past performance (Burke et al., 1978; Fletcher and Williams, 1976). Relatedly, Mount (1984) recently found that perceiving the appraisal form as helping to discuss performance in the PAI was the only aspect of the appraisal system related to both supervisors' and subordinates' satisfaction with the appraisal interview and system. Taken together, these studies suggest that appraisal techniques which focus the interview on subordinates' past and future performance would appear to result in the most positive attitudes and behaviors.

Several researchers have compared behaviorally based techniques to traditional graphic rating scales in terms of the appraisal interview. Ivancevich (1980) found that engineers rated with behavior expectation scales perceived their interviews as providing more clarity, more meaningful feedback, and as being more equitable than engineers rated with a trait-based system. In

addition, the engineers rated with behavioral expectation scales reported less job-related tension and better performance. Research by Hom, DeNisi, Kinicki, and Bannister (1982) suggests that feedback from behaviorally-anchored rating scales produces greater behavioral change than feedback from summated rating scales. Future research also needs to consider how supervisors react to using various appraisal techniques, since they are the ones who must actually use the appraisal instrument.

One way to increase acceptance of the rating instrument by both superiors and subordinates is to involve them in its development. Landy and Trumbo (1980) suggest that the positive results obtained with participatively developed appraisal techniques may have nothing to do with the measurement of performance per se, but may largely stem from high involvement of supervisors and subordinates in scale development. A recent study supports this proposition with regard to subordinates. Silverman and Wexley (1984) either involved or did not involve subordinates in the development of BARS which were used in the appraisal interview. They found that those subordinates who participated in the development of BARS perceived that the interview was more useful, that their supervisor was more supportive, that they were given more of an opportunity to participate, that goals and objectives were set to a greater extent, and that they made more of an impact or contribution to the appraisal interview. In addition, the subordinates who participated in instrument development were more satisfied with the interview and were more motivated to improve future job performance.

An unanswered question from this research is whether the benefits of participative development stem largely from increased familiarity with relevant performance dimensions, or from increased commitment to make the system succeed which participation seems to elicit. Whether these beneficial effects are primarily informational or motivational could have a major impact on the general applicability of this approach to subsequent samples. Informational effects could be produced more efficiently for large numbers of subordinates by training rather than by direct participation in instrument development. Motivational effects, however, may best be produced by participation.

In sum, it appears that rating format can affect the conduct and outcome of the appraisal interview. The studies reviewed above seem to indicate that formats which focus on specific past behavior, such as BARS, are superior to trait based approaches, and also that future oriented, goal based appraisal methods lead to more effective interviews. The apparent conflict in these sets of recommendations has been resolved by Keeley (1978), who suggests that the appropriate appraisal technique is determined by the fit between organization's structure, the nature of the job, and the employees' need for independence. Keeley recommends that behaviorally-based procedures, defining specific procedural and performance expectations, be used for employees low in need for independence who are employed in highly routine jobs; that goal based appraisals defining performance less narrowly be used for employees with a moderate degree of autonomy in moderately routine jobs; and that multiple subjective judgments, defining performance less specifically be used for highly independent employees in very non-routine jobs.

Content of the Feedback

The second major section of this paper concentrates on the content of the feedback conveyed in the PAI. Feedback has often been described in terms of the two primary functions that it performs for recipients, directing and motivating. However, in practice it is hard to separate the effects of these two functions (Annett, 1969; Ilgen et al., 1979). Recent work on control theory (Carver & Scheier, 1981) makes this artificial distinction less necessary. Both functions are encompassed in the process of comparing performance (via feedback) to a goal or standard and assessing any discrepancy. Awareness of a discrepancy is itself motivational. If the individual believes that meeting the goal is possible, he/she will act to do so. Hopefully either the feedback itself or the coaching and advice supplied concurrently will serve the directive function of helping the performer select the most efficacious route to goal accomplishment, be it simple persistence, strategy change, or increased effort. Taylor, Fisher, and Ilgen (1984) suggest that feedback in organizations be viewed from this broad motivational framework. From such a framework, performance feedback needs to be treated as a complex, multidimensional stimulus order to understand its effects on employee attitudes and behavior. Therefore, the following discussion of feedback processes in the PAI considers how the various dimensions of feedback, alone or in combination, influence supervisor and subordinate attitudes and behavior.

Sign

The sign of the feedback (i.e., its positive or negative nature) is the most important determinant of supervisors' and subordinates' reactions to the

process of providing and receiving feedback in the appraisal interview. Negative feedback (i.e., information indicating one is below an accepted standard) often results in subordinates feeling threatened and acting defensively in the appraisal interview (Kay et al., 1965). Negative feedback is also perceived as less credible, less accurate, is less likely to be accepted, and is less well remembered by subordinates than positive feedback (Ilgen, Mitchell, & Fredrickson, 1981; Ilgen & Hamstra, 1972; Snyder & Shenkel, 1976; Stone & Stone, 1984, 1985). In contrast, the provision of positive feedback results in higher subordinate satisfaction, motivation, and performance (Ilgen & Hamstra, 1972; Morran & Stockton, 1980; Pavett, 1983).

Based on these findings, providing positive feedback in the PAI would be predicted to produce the most beneficial results. However, to fully understand subordinates' responses to feedback, one needs to consider more than just the apparent sign or content of the feedback message. In particular, one needs to consider subordinates' interpretations of the feedback message because these interpretations are the most immediate determinant of subordinates' responses (Taylor, et al., 1984). Several factors which may influence how subordinates react to the sign of the feedback they receive include expectations, differences between organizational and subordinate standards, and assessments of source credibility.

The first factor which influences how individuals interpret the feedback they receive is how positive or negative the feedback is in comparison to what they expected to receive. Bernstein and Lecomte (1979) investigated individuals' reactions to feedback that was more positive, the same, slightly

more negative, or much more negative than what they expected to receive from a credible source. They found that feedback congruent with what individuals expected was perceived as most valuable, followed by that which was more positive, slightly negative, or much more negative than expected. Relatedly, research by Taylor (1981) showed that when performance expectations were high or low, feedback which deviated considerably from expectations resulted in greater perceptions of inaccuracy. Pearce and Porter (1986) studied two agencies in which a new appraisal system was being introduced. Individuals who were given feedback that they were merely "satisfactory" performers rather than "good" performers subsequently reduced their organizational commitment. In one agency, "satisfactory" feedback also led to less favorable attitudes toward the appraisal system.

Differences between organizational/supervisory and subordinate standards or goals is the second factor which should influence the perceived sign of descriptive feedback. When quantitative differences in supervisors' and subordinates' goals exist, the same outcomes will be perceived differently by the supervisor and subordinate. For example, being correct 80% of the time will be interpreted differently by a subordinate who believes that anything over 70% is fine than by a superior who feels that anything less than 90% is unacceptable. When qualitative differences in supervisors' and subordinates' goals exist, feedback is likely to have little impact on subordinates' behavior because it is likely to be perceived as irrelevant information (Taylor et al., 1984).

A third factor which influences how subordinates process and react to the objective nature of the feedback is their evaluation of the source's credibility. Several determinants of a supervisor's credibility as a feedback source have already been considered. In terms of the present discussion, the important point is that subordinates are more likely to accept negative feedback from high credibility than low credibility sources. Credibility and acceptance of negative feedback is enhanced when feedback is provided frequently, is specific, and is stated in descriptive, nonevaluative terms (Ilgen et al., 1979; Jacobs, Jacobs, Feldman, & Cavior, 1973; Landy et al., 1978).

In sum, subordinates' reactions to positive and negative feedback in the PAI is not influenced solely by the objective sign of the feedback. Rather, it is necessary to examine how the feedback is interpreted from subordinates' perceptual set or frame of reference to fully understand the impact it will have.

Given subordinates' reactions to negative feedback, it should not be surprising that supervisors differ in how they transmit positive and negative feedback to subordinates. Fisher (1979) observed that supervisors who were required to give feedback about below average performance tended to distort their feedback, rating their subordinates' performance less negatively than did supervisors who completed the same performance ratings but who were not required to give any feedback. Correlational evidence from this study indicates that the distortion in the ratings of those giving feedback about poor performance occurred because supervisors believed that receiving negative feedback would be unpleasant for the subordinate and that the subordinate would probably dislike

them for giving such feedback. Interestingly, and opposite to what was predicted, Fisher (1979) discovered that supervisors gave negative feedback more quickly than positive feedback, and did so on the basis of a smaller work sample. Larson (1984) has suggested that negative feedback may be given more quickly because below average performance is more salient to supervisors and is more easily recognized than above average performance.

Ilgén and Knowlton (1980) sought to determine whether the biased feedback provided to objective poor performers was due to supervisors misperceiving actual performance, or accurately perceiving performance but then distorting feedback. This study revealed that supervisors recognized poor performance accurately but communicated inflated assessments, and that this distortion was most pronounced when supervisors believed that the subordinate's poor performance was due to low ability. In addition, Ilgén and Knowlton found that supervisors gave less motivationally oriented feedback to subordinates who they perceived to be failing due to lack of ability than to subordinates whose poor performance they attributed to low effort.

Research by Larson (1986) showed that supervisors are much less likely to give negative feedback than positive feedback, especially when subordinates show gradually improving performance. While less feedback was given about poor performance, Larson (1986) found that supervisors appeared to compensate by giving more neutral encouragement (i.e., encouragement which provides no information about how poorly one is performing) following task failure than task success. When negative feedback was given, however, Larson found it tended to be more specific than positive feedback.

The findings from these studies indicate that supervisors may often be reluctant to give subordinates negative feedback. Further, this research indicates that when supervisors do provide negative feedback to subordinates, the feedback may be distorted upward. Future research needs to attempt to identify the motivational basis of these biases. At a broad level, the reluctance to give negative feedback seems to reflect a concern for how the subordinate will react to the feedback. However, it is not clear whether this implies a concern for the subordinate's experienced motivational and emotional states (e.g., a desire not to discourage the subordinate or make him/her feel bad), and/or whether it suggests more personally relevant concerns, such as a desire to avoid the negative reactions of the subordinate and any feelings of guilt or other unpleasant mood states that might accompany those reactions (Fisher, 1979). Further research is needed to determine which motives, alone or in combination, are operating.

Despite both supervisors' and subordinates' often adverse reactions to negative feedback in the PAI, information that one is not performing at an acceptable level is necessary before performance improvements can occur. The limited research on how to communicate feedback in the interview setting has focused on how to present positive and negative feedback together in the PAI. Research by Fletcher and Williams (1976) showed that subordinates who received both positive and negative feedback in the PAI were more motivated and improved their performance more than subordinates who received only positive or only negative feedback. Several studies have investigated how best to present both positive and negative feedback in the PAI. In a study examining the

relationship between comments from a supervisor and subordinate defensiveness, Kay et al. (1965) found that a common way supervisors try to cushion the impact of negative feedback is by alternating positive and negative feedback. They argue that the effect of this "praise/criticism/praise sandwich" is that subordinates quickly learn the pattern and anticipate the upcoming negative feedback. This anticipation blocks subordinates from attending to positive information and therefore reduces the beneficial effects of positive feedback.

Stone et al. (1984) directly investigated the effects of presenting either positive or negative feedback first in the interview. They found that when an appraisal session was opened with positive feedback, subordinates were more likely to perceive the feedback as accurate than if the session was opened with negative feedback. They also found that this relationship was moderated by the supervisor's expertise and the subordinate's locus of control and self-esteem: when the supervisor was high in expertise and the subordinate had an internal locus of control or high self-esteem, positive-negative sequenced feedback was perceived as more accurate than negative-positive sequenced feedback.

In addition to the sign of the feedback, other content dimensions also influence how employees perceive and react to feedback. It is generally recommended that feedback be specific, descriptive, provided frequently, and close in time to the behavior(s) it references (Beer, 1981; Taylor et al., 1984). The research which has been done on these feedback dimensions, while scant, generally supports these common prescriptions.

Specificity

Most of the studies on feedback provide feedback only in terms of summary performance. Few studies have systematically compared the effects of providing

specific versus general feedback. However, several recent studies suggest that specificity is an important dimension of the feedback message.

Ilgen, Mitchell, and Fredrickson (1981) found that subordinates perceived specific feedback as more helpful and motivating than general feedback. They also found that the positive effects of specific feedback generalized to feelings and beliefs about the supervisor. When the supervisor provided specific feedback, subordinates perceived the supervisor as more helpful and knowledgeable of their performance. Similarly, Liden and Mitchell (1985) found that individuals had more positive affect toward the feedback message and source when the feedback was specific rather than nonspecific.

The findings from these studies are interesting for two reasons. First, they indicate that supervisors can increase their credibility through the nature of the feedback they provide. Second, they indicate that subordinates do not clearly demarcate between the nature of the feedback and the source of the feedback.

Ilgen, Peterson et al. (1981) investigated how specificity of feedback in the work environment influences subordinates' perceptions and reactions to the PAI. They found that when the supervisor was seen as providing specific feedback on a day-to-day basis, subordinates were more satisfied with the appraisal interview and saw it as containing more positive, helpful, and specific information. They also found that supervisors thought they provided more specific feedback on a day-to-day basis than did their subordinates.

Jacoby, Mazurby, Troutman, and Kuss (1984) compared the value of "outcome" feedback (i.e., feedback that just describes the correctness of a response) and

"cognitive" feedback (i.e., feedback that presents information regarding why a given response was correct or not). With security analysts, they found that better performing decision makers relied less on outcome feedback than poorer performing decision makers. Similarly, Jacobs, Jacobs, Feldman, and Cavior (1973) examined reactions to descriptive and evaluative feedback. The results of this study indicated that descriptive feedback presented in behavioral terms was perceived as more accurate than evaluative, emotionally-tone feedback. In addition, the previously-discussed studies by Ivancevich (1980) and Hom et al. (1982) suggest that behaviorally-based feedback provides more meaningful and clear information which improves future performance.

The above studies indicate the providing specific feedback both on an informal day-to-day basis and more formally in the appraisal interview will have a positive impact on the perceptions, attitudes, and behavior of subordinates. While these studies do not directly address why specific feedback produces positive results, specific feedback seems to work by fulfilling both motivational and directive functions. Further, it would appear to be harder to ny, yet less threatening than general evaluative feedback. Future research needs to investigate the conditions under which specific feedback is most useful. For example, for older employees in jobs where there is not a clear means-ends linkage, behavioral feedback and goals may not be very useful and may even have negative effects by threatening their freedom to the job in their own way (Brehm & Brehm, 1981). However, for new employees, specific feedback may be very useful because it would clarify what is expected of them and what behaviors lead to desired outcomes.

Performance Attributions

In addition to conveying positive or negative feedback of varying specificity, supervisors often (implicitly or explicitly) convey information about their attributions for the causes of subordinate performance during the PAI. The role of performance attributions in supervisor-subordinate interactions has received much attention in recent years. The majority of this research has focused on how supervisors determine the causes of subordinate performance and how they respond to subordinates based on these determinations. Research by Mitchell and his colleagues (Green & Mitchell, 1979; Mitchell & Wood, 1980; Mitchell & Kalb, 1981) has shown that whether a subordinate's effective or ineffective behavior is attributed to ability, effort, task difficulty, or luck by the supervisor has clear implications for how that behavior will be evaluated and rewarded. Casual attributions to effort appear to be the major determinant of how performance is evaluated and rewarded. Regardless of ability, when a subordinate's success is attributed to effort, the subordinate's performance is evaluated favorably and rewarded. When failure is seen by the supervisor as due to a lack of effort, ineffective behavior is severely punished. The subordinate who is evaluated and punished most negatively is the individual seen as having high ability but not exhibiting sufficient effort. On the other hand, when the supervisor makes external attributions about a subordinate's performance (i.e., luck or task difficulty), effective behaviors are not likely to result in rewards and ineffective behaviors are likely to produce sympathy and support rather than punishment from the supervisor.

Ilgen and Knowlton (1980) extended this research into the performance feedback area by investigating how supervisors' performance attributions influence the nature of the feedback they provide to subordinates. They found that under conditions of low subordinate performance, supervisors gave more motivationally-oriented feedback to subordinates whose performance was attributed to a lack of effort than to those whose performance was attributed to a lack of ability. The reverse pattern of findings was found for high performing subordinates: more motivational feedback was given to subordinates for whom ability was seen as a major contributing factor than was given to those whose performance was attributed to effort. Thus, the supervisors' performance attributions are an important determinant of how they behave and the nature of the information they provide to subordinates during the PAI.

A recent study by Liden and Mitchell (1985) has investigated how subordinates' attributions about the feedback they receive influences their reactions to this information. Liden and Mitchell found that negative feedback which implied an external cause for performance (e.g., working conditions, quality of tools) was perceived as more helpful, of higher quality, and elicited more positive affect and intended future effort than negative feedback which attributed performance to an internal cause (e.g., a lack of ability or effort by the subordinate).

Taken together, the above research underscores the importance of investigating the relationship between supervisor's and subordinate's attributions in the interview setting. Assymetric beliefs about the causes of the subordinate's performance may be an important source of supervisor-subordinate conflict and miscommunication during the PAI.

Research on moderators or "biases" in basic attributional processes suggests several aspects of the supervisor-subordinate relationship which may contribute to differences in supervisor's and subordinate's attributions (see Ross, 1977 for a complete discussion of these moderators). First, actors and observers differ in causal attributions: actors emphasize situational factors; observers, the actors' personal dispositions. This tendency is partly due to the differential salience of situational and personal information to the actor and observer, respectively. In the supervisor-subordinate relationship the supervisor has to interpret the subordinate's behavior from an observer perspective. Thus, supervisors' attributions for subordinates' behavior will in general tend to emphasize internal causes whereas subordinates' self-attributions will emphasize external causes.

Second, there is a tendency, termed "hedonic relevance," by observers to see actions having positive or negative consequences for them as more dispositional than other actions. Coupled with this is a tendency for people to readily take responsibility for positive outcomes but deny responsibility for negative outcomes. A common finding in this regard, for example, is that we tend to attribute our successes to internal causes and attribute our failures to external causes (Bradley, 1978). When a supervisor and subordinate are closely linked in task performance (as they are in most work organizations), it seems likely that the supervisor's attributions could fall prey to a combination of the above biases. For example, these biases could serve to accentuate actor/observer differences: if a supervisor attributes a subordinate's poor performance to internal causes (e.g., the subordinate's ability) it is unlikely the supervisor will feel that this subordinate's behavior reflects back on him

or her (the supervisor) in any way. However, when the supervisor attributes the subordinate's poor performance to external causes (e.g., the task was too difficult), the failure may partially be perceived (by the supervisor and others) as due to inadequate supervision. Thus, we would find that the supervisor is likely to attribute the successes of subordinates to external causes (e.g., good leadership) and the failures to internal characteristics (e.g., the subordinate's low effort). Subordinates are likely to reach the opposite conclusions.

Fourth, certain aspects of the supervisor subordinate relationship seem likely to moderate basic attributional processes. Essentially any factor which makes the supervisor psychologically closer to the subordinate will increase the tendency for the supervisor to make self-like attributions regarding the subordinate's behavior, while anything that increases their psychological distance will reduce this tendency and bring about discrepant attributions. In fact, a few studies have shown that interpersonal factors such as empathy, similarity, and personal liking (Regan, Strauss & Fazio, 1974; Regan & Totten, 1975) can increase the probability that observers make attributions similar to actors' self-attributions. Mitchell and Kalb (1982) conducted an experiment in which supervisors either had or did not have personal experience on the subordinate's task. Those with experience tended to make more actor-like attributions when they evaluated a poor performing subordinate.

Our discussion so far on attributional processes has ignored one important aspect of the appraisal interview -- the strategic use of performance explanations by the supervisor and subordinate. Research on impression management or self-presentation (Schlenker, 1980) reveals that individuals often

attempt to actively manage performance-related information in order to present as favorable an impression as possible. For subordinates, this may involve associating themselves with positive outcomes (e.g., by offering internal causal explanations) and disassociating themselves from negative outcomes (e.g., by offering external causal attributions) during the appraisal interview. A study by Wood and Mitchell (1981) suggests that this tactic may be effective in avoiding the negative repercussions associated with poor performance. Wood and Mitchell found that when external excuses were offered by subordinates for their poor performance (e.g., we're understaffed), experienced nursing supervisors attributed less responsibility to subordinates and were less personal and punitive in their responses to poor performance.

The preceding discussion offers several tentative explanations for a common problem in PAIs -- subordinates consistently rate their performance higher than their supervisor does, even when asked soon after the PAI (Ilgen, Peterson et al., 1981). First, the actor-observer and self-serving biases suggest that actors (i.e., subordinates) will tend to attribute poor performance to factors outside themselves (e.g., work conditions, quality of tools), while observers (i.e., supervisors) will attribute poor performance to internal factors of the actor (e.g., lack of ability or effort). If supervisor's and subordinate's explanations for performance do not coincide (which may occur frequently due to the actor-observer difference), subordinates may deny poor performance feedback.

Second, supervisors may attempt to cushion the impact of negative feedback on subordinates by offering external explanations for poor performance. This strategic use of performance explanations may lead subordinates to believe that

poor performance is not generally under their control and therefore they do not incorporate it into their self-assessments.

Third, supervisors may be unaware of situational constraints limiting performance. Pooyan, O'Connor, Peters, Quick, Kulisch, and Jones (1982) found that supervisors were much less aware of these constraints than were subordinates. Thus, the differential attributions of supervisors and subordinates may be at least partially due to differences in knowledge regarding the work environment. One advantage of participative PAIs is that they can provide upward information to superiors regarding situational constraints in the work environment.

Goal Setting

In addition to giving and receiving feedback, the PAI also often involves setting future performance goals or objectives. In examining the impact of goal setting during the appraisal interview on employees' attitudes and behavior, two related areas of research will be discussed. First, studies which have directly examined the effects of goal setting in the PAI will be reviewed. Second, research which has taken a more detailed look at the characteristics or dimensions of goals related to enhanced performance will be reviewed.

Goal Setting in the PAI

Goal setting for or by the subordinate during the appraisal interview has been consistently related to positive interview outcomes. In correlational studies, goal setting has been positively related to subordinates' satisfaction with the appraisal interview (Burke et al., 1978; Greller, 1978; Nemeroff & Wexley, 1979), satisfaction with the overall appraisal system (Dipboye &

dePontbriand, 1981), and job satisfaction (Greller, 1978). Goal setting in the PAI has also been positively related to subordinates' perceptions of appraisal fairness and accuracy, helpfulness of the supervisor during the PAI, clearing up of job problems, desire to improve performance, and self-reported performance improvements (Burke et al., 1978, Landy et al., 1978).

Although less research has focused on supervisors' reaction to goal setting, correlational studies indicate that goal setting also functions positively in the appraisal interview for supervisors. When performance goals are set during the PAI, supervisors perceive the interview as fairer and as having a greater impact on subordinate performance, are more satisfied with the interview, and look forward to future reviews more (Burke et al., 1978; Nemeroff & Wexley, 1979).

Several experimental studies have examined the effects of goal setting in the PAI. Ivancevich (1982) assigned supervisors of engineers and scientists to one of four appraisal interview conditions: (1) assigned goal setting, (2) assigned goal setting and feedback, (3) feedback only, (4) no goal setting and no feedback (control condition). Supervisors then received training on how to conduct effective appraisal interviews which varied depending on their assignment to experimental condition. Two to four months after their next PAI, subordinates' reactions to the interviews were measured. The results showed that assigned goal setting, assigned goal setting plus feedback, and feedback only were superior to the control group in subordinates' perceptions of equity in the appraisal interview. With regard to subordinates' perceptions of accuracy and clarity, the assigned goal setting plus feedback condition was

superior to the other conditions. In addition, subordinates reported more anxiety in the goal setting conditions than when goals were not assigned.

This interesting study has several unfortunate shortcomings. First, no perceptual or behavioral measures of this study's manipulations were obtained. Therefore, it is unclear whether the supervisors actually conducted the PAI as they had been trained to do. Second, the data were collected from questionnaires administered to subordinates several weeks after the PAI; thus, the results may be subject to response-response and memory bias. Finally, by focusing just on subordinates' perceptions, it is not possible to determine what effects goal setting and feedback may have had on subordinates' actual performance.

Latham, Mitchell, and Dossett (1978) had supervisors of engineers and scientists rate their subordinates on specific job behaviors which were deemed necessary for successful job performance. Supervisors were then trained to either (1) participatively set behavioral goals, (2) assign behavioral goals, (3) assign do your best goals, or (4) set no goals (control group) with their subordinates during their next PAI. Three months after the next set of appraisal interviews, the supervisors rated the job behaviors of their subordinates again. While there were no differences between the participatively set and assigned behavioral goals in goal attainment and performance, these two conditions outperformed the do your best goal condition. Thus, specific goals, either assigned or participatively set, led to higher performance than no goals or do you best goals. However, it can be argued that there is a problem in interpreting the results of this study because the same supervisor provided the pre and post behavioral ratings. That is, because the

supervisors knew which goal setting condition his/her subordinates were in, the post test behavioral ratings could be biased.

Ivancevich and McMahon (1982) implemented six combinations of imposed goal setting and feedback methods in groups of engineers. They found that goals improved performance compared to no goals and that feedback, whether from superiors, peers, or the self, improved performance compared to no feedback. The best results were obtained when the engineers generated their own feedback by monitoring progress toward goals.

Taken together, the findings from both correlational and experimental studies indicate that goal setting plays a positive role in the PAI, especially when used in combination with feedback. However, these studies did not explicitly assess the nature of effective performance goals. The next section attempts to do this by summarizing the literature on goals and goal setting beyond the PAI.

Dimensions of Effective Performance Goals

Much of the research on the goal setting process has been based upon Locke's (1968) model. This model works on the assumption that goals represent an end state towards which a person strives and serve as immediate regulators of action. Research on this model has focused largely on the relationship between goal content and performance (see Locke et al., 1981 for a review of the goal setting literature).

Locke (1968) suggested that the two main dimensions of goal content are specificity or clarity (i.e., the degree of quantitative precision with which the aim of the goal is specified) and difficulty (i.e., the degree of

proficiency or level of performance sought). He proposed that specific and difficult goals motivate higher performance, given that these goals are accepted. Overall, research has strongly supported this proposition. Locke et al. (1981) reported that 99 out of 110 studies found that specific, difficult goals produced better performance than medium, easy, do you best, or no goals.

Because most goal setting studies have found little variance in goal acceptance, there has been a tendency for researchers to equate externally set goals with an individual's self set goals. In studies in which variance in goal acceptance was noted, individuals who did not accept the assigned goal were omitted from the analyses (Locke, Mento, & Katchjer, 1978). Therefore, relatively little attention has been paid to the process of goal acceptance.

However, research which has been done recently suggests that goal acceptance is an important moderator in the goal setting-performance process. With goal acceptance, specific and difficult goals lead to higher levels of performance. In contrast, when goals are not accepted, the relationship between goals and performance disappears (Erez & Zidon, 1984; Erez, Earley, & Hulin, 1985). Earley and Kanfer (1985) have found that goal acceptance and performance are facilitated by observing a high performing role model and by being given some choice as to the goal level and the strategy to be used in working toward the goal.

Given the importance of goal acceptance, the key question becomes how difficult goals should be in order to insure goal acceptance while still encouraging high levels of performance. Locke and his colleagues have cautioned

researchers and practioners that goals should be challenging but reachable. This caution is based on the assumption that individuals will not accept goals that they believe cannot be reached. Carver and Scheier (1981) agree. They state that a behavior-goal discrepancy triggers a process in which the probability of eventually meeting the goal is assessed. If expectancy is high, the individual will continue to strive to meet the goal. If expectancy is low, the goal will be rejected or modified, and effort toward the original goal will be withdrawn. Data from numerous studies support the operation of this process.

Erez and Zidon (1984) found that goal acceptance decreased as goals became more difficult, but that an individual's goal acceptance for a given level of goal difficulty could be modified by social information. Although expectancies regarding goal attainment were not measured in this study, the results of the study can be interpreted in terms of expectancy beliefs. That is, when past performance and/or social information indicated that goals were not likely to be attained, individuals no longer accepted the goals. Several other studies have shown that moderate to high expectancies for goal attainment are necessary for goals to be accepted and influence performance (Campion & Lord, 1982; Locke, Frederick, Lee & Bobko 1984).

The above studies suggest that maintaining moderate to high expectancies for goal attainment is crucial to goal acceptance. Supervisors can facilitate this by allowing participation in the setting of reasonable goals and by providing feedback which is specific enough to aid in the selection of an effective performance strategy for goal accomplishment. In addition, they can express confidence in subordinate's ability and point out the success of others on similar goals in order to strengthen subordinate's expectancies (Bandura, 1977).

In addition to goals being accepted, specific, and difficult, research has shown that performance feedback is also an integral component of goal-based motivation. Several studies have demonstrated that neither goals or feedback, by themselves, significantly improve performance; rather, both are necessary for performance improvements (Erez, 1977; Strang, Lawrence, & Fowler, 1978). Recent theoretical and empirical research on the goal setting process suggests that feedback operates in this context by allowing individuals to monitor their progress toward goals and make cognitive and/or behavioral adjustments based on this information (Campion & Lord, 1982; Carver and Scheier, 1981; Matsui, Okada, & Inoshita, 1983; Taylor et al., 1984).

In summary, there are still unanswered questions about how goal setting and feedback influence reactions to the PAI. The research on these aspects of the appraisal interview has been largely correlational, utilizing self-report measures of unknown validity with the methodological and interpretation problems inherent in this type of research. Future research needs to focus more on conducting experimental studies which obtain both perceptual and non-perceptual measures of the types of goals set, the degree of participation, and the amount of feedback given. Especially helpful in capturing the "actual" and "perceived" and nature of the interview's content would be the use of videotape technology.

Several additional issues involving goal setting and feedback also should be explored. No research has systematically investigated even the very basic ways in which feedback and goals may interact. For example, if individuals do not accept the feedback from a given source, it also seems unlikely they will accept goals set by this same source. Ilgen et al. (1979) have proposed a framework by which goal specificity and feedback specificity interact which has

yet to be empirically investigated. Similar meaningful frameworks comparing other goal setting and feedback dimensions (e.g., the source of goals and feedback) need to be developed and tested.

A further area for future studies is the mechanisms by which goal setting and feedback have their effects. Many researchers have proposed and tested hypothesized cognitive mediators (e.g., the relationships between effort, behavior, and outcomes) to explain the effects of goal setting and feedback (Kim, 1984; Pavett, 1983). However, other explanations for the effects of goal setting and feedback on performance exist which do not presuppose such complex strings of cognitive mediators. Carver and Scheier (1981) propose that awareness of discrepancy between the current state and a goal or standard is aversive and thus motivates one to take corrective action (if achieving the goal is considered possible). This appears to be a very simple model of the process by which goals and feedback affect performance. The complexities arise in explaining when and why individuals bother to make comparisons and thus notice and respond to discrepancies. Much of human behavior seems to be relatively thoughtless and automatic, controlled by habit rather than by explicit reference to goals. Thus, goals often do not do a good job of directing moment-to-moment behavior. However, if individuals can be induced to think about their goals, then discrepancies should be noticed and responded to.

Carver and Scheier (1981) cite a number of studies in which focus of attention is shown to be a crucial moderating variable. When individuals are induced to focus on themselves (usually by working in front of a mirror), they become more aware of goal-behavior discrepancies and act to reduce them. For instance, individuals working in front of a mirror report their past performance

more accurately and compare their work more frequently to an objective standard. (Pryor, Gibbons, Wicklund, Fazio, & Hood, 1977; Scheier and Carver, 1983).

The idea that attention must be directed to one's goals in order for them to be motivational has important potential implications for organizations. We know that goal setting works consistently in the lab, perhaps because there is no time to become distracted or forget the goal in the short work sessions with frequent feedback which are typical of lab studies. However, in organizations, goals are quite likely to fade in salience, particularly if there is a whole year between setting the goal and subsequently being expected to demonstrate goal accomplishment. If Carver and Scheier are correct about the ways goals regulate performance, then organizations may be able to take steps to improve the effectiveness of goal setting programs. Specifically, individuals need to be reminded of their goals periodically (perhaps by requiring monthly self-assessments of goal progress) and need to receive unambiguous feedback which is clearly relevant to the goal (and thus triggers comparison processes). Two studies of industrial safety by Komaki and her colleagues demonstrate the effectiveness of this approach. In both studies, safety "goals" were implicitly introduced by intensified safety training and exhortations to achieve 90% safe behaviors. Later, feedback on percent safe behavior was provided several times per week. During this phase, performance improved dramatically. Feedback was then discontinued, and performance dropped to baseline levels. After feedback was reintroduced, performance again increased (Komaki, Barwick, and Scott, 1978; Komaki, Heinzmann, and Lawson, 1978). Thus, it is not enough just to have goals, or to have the ability to meet them. Feedback must be available (either

naturally from the task or provided by the organization) and comparison processes must be triggered. Research is needed on ways of increasing self-focus and/or increasing goal and feedback salience during the intervals between formal PAIs.

A very different approach to why goals work is provided by Salancik's (1977) work on commitment. He proposed that in the goal setting and feedback situation an employee is induced to make a public, volitional commitment which implies that he or she not only is capable of achieving the goal, but is also willing to attempt to achieve it. In addition, Salancik proposes that performance monitoring and providing feedback can increase the level of accountability to the previous commitment. Therefore, according to Salancik, it is the context of goal setting and feedback in which the individual's commitment to the specific performance goal is stated in public that creates increased persistence and performance on a given task. Consistent with this view, Dosset and Trimble (1985) found that real estate agents who had chosen to discuss their goals with their office manager had higher goals, more goal commitment, and better performance than agents who had not publicly disclosed their goals. However, this study was correlational in nature, and it seems likely that agents who chose to reveal their goals were probably more motivated and committed at the outset than those who chose to keep their goals private.

Related to Salancik's commitment hypothesis, future research also needs to pay more attention to the context in which the PAI occurs. Focusing on how the context surrounding the PAI influences goal setting and feedback processes raises several interesting research questions. For example, what are the effects of private versus public goal setting and feedback and under what

conditions is either strategy most effective? Several studies suggest that the public-private dimension has an important influence on employees' attitudes and behavior (Jackson & Zedeck, 1982; White, Mitchell, & Bell, 1977). A related question is whether goals should be set and feedback given in relation to an individuals' own past performance or in relation to others' performance. Attention to these types of contextual questions will hopefully provide a more complete understanding of how the context of the PAI influences supervisors and subordinates.

In the next section, we consider the process by which a supervisor conveys performance information in the PAI.

Process of the Performance Appraisal Interview

The third major area of research to be reviewed focuses on the process by which the PAI is conducted. To a limited extent, the preceding sections have raised several process-related questions. This section gives full attention to these issues by focusing on research around two related themes: (1) subordinate participation in the interview, and (2) supervisor support and criticism during the interview. Research from each of these areas will be reviewed in turn.

Participation

The effect of subordinate participation in the PAI has been the subject of numerous anecdotal and empirical studies. While participation has long been thought to have positive effects on work-related perceptions, attitudes, and behavior, the results from empirical studies have been mixed (see Locke & Schweiger, 1979 for a review of this literature). This pattern of results has

led some researchers to suggest that the positive benefits from participation may have been overstated (Locke & Schweiger, 1979; Locke et al., 1981).

However, before any general conclusions are drawn regarding the effects of participation, one needs to consider several deficiencies which exist in the past research on participation. First, across study comparisons reveal that different researchers have defined and operationalized participation in widely differing ways, including the invitation to participate (Greller, 1978; Nemeroff & Wexley, 1979), perceived influence in the interview (French, Kay & Meyer, 1966), perceived ownership of the interview (Greller, 1978), proportion of the time spent talking (Burke, et al., 1978; Greller, 1975), and participation in goal setting (Greller, 1978). Few attempts have been made to bring together these varying definitions and operationalizations of participation into an integrated and meaningful framework.

This lack of integration across studies on participation has led to a second deficiency in this area of research: little attention has been paid to the processes by which participation operates. While many studies have operationalized participation as an upward flow of information (i.e., from subordinate to supervisor), there has been intra and inter-study variation in the extent to which participatory PAIs also included a downward (supervisor to subordinate) flow of information. Consequently, it is difficult to determine what features of participation are responsible for the results obtained in most studies.

A third potential reason that past research on participation has produced mixed results is the failure of many studies to consider the context in which the PAI occurs. In particular, few studies have considered the effectiveness of

participation in the context of the characteristics of the supervisor, subordinate, and supervisor-subordinate relationship. However, early work by French et al. (1966) and Bassett & Meyer (1968) clearly demonstrated the importance of these factors when investigating participation. French et al. found that when a subordinate had a relationship with his/her supervisor characterized by high threat and low levels of day-to-day participation, increasing the level of participation in the PAI had negative effects on the subordinate's attitudes and performance. In comparison, participation had positive effects on subordinates whose relationship with their supervisor was nonthreatening and had high levels of day-to-day participation. Bassett and Meyer (1968) found that new employees and employees with a low need for independence were more satisfied with traditional supervisory appraisals than participative self-appraisals. Unlike the studies of French et al. and Bassett and Meyer, later studies have not systematically considered the characteristics of the supervisor, subordinate, and supervisor-subordinate relationship which may moderate the effects of participative PAIs.

A fourth weakness in this research area is the methodological quality of the studies. As with much of the research on PAIs, studies in this area have been largely self-report and correlational in nature. Therefore, the methodological problems inherent in this type of research (e.g., common method variance, multiple causality, asymmetric supervisor-subordinate perceptions) make interpretation of the results of these studies problematic.

While most of the research on participation has been plagued by the problems outlined above, several well designed studies have recently appeared. In a laboratory setting, Kanfer, et al. (1986) examined the effects of the

various information exchanges which occur during participative appraisal interviews. Participants in this study worked on a task under conditions of either high or low upward information input to their supervisor and either high or low provision of downward knowledge by a supervisor to the participants. Based on the research on procedural fairness (Folger, 1977), it was predicted that the opportunity to provide upward input should exert influence on participants' perceptions of fairness and satisfaction with the supervisor. In contrast, the provision of task-specific downward information was expected to increase task clarity and therefore enhance performance effects. However, since the provision of only downward information without the opportunity to exert upward influence may lead to frustration, Kanfer et al. posited that high upward and downward information flow should lead to the greatest performance improvements.

The results of the study largely supported this conceptualization of participation processes. The opportunity for participants to provide upward information to the supervisor consistently influenced their beliefs about the fairness of the evaluation procedure, evaluation outcome, and their satisfaction with the supervisor. Also as predicted, high upward-high downward information flows led to the best performance by participants on an initial task and a greater willingness to use the same evaluation procedure in the future. In addition, performance on a subsequent unrelated second task was highest when participants had previously received a high downward flow of information. Because the information provided regarding the initial task was unrelated to the second task, this finding suggests that the provision of downward information

has effects in ways other than simply increasing immediate task clarity. Kanfer et al. suggest that high downward information flows early in a series of evaluation procedures may produce the perception of supervisor supportiveness, which leads to higher performance expectancies and goals, and higher performance on subsequent tasks.

Erez, Earley and Hulin (1985) have recently examined the role of participation in the setting of performance goals. Research comparing assigned and participatively set goals has consistently found no differences between these two strategies in their effects on performance (Locke & Schweiger, 1979; Locke et al., 1981). However, the high and invariant levels of goal acceptance found in these studies may account for the failure to find differences between assigned and participatively set goals (Latham & Saari, 1979). To test this idea, Erez et al. (1985) set forth a two-step model which hypothesizes that participation increases goal acceptance, which in turn leads to higher performance. In both laboratory and field settings, they found support for their model. Increasing participation in goal setting led to higher levels of acceptance of difficult goals. Higher levels of goal acceptance, in turn, led to higher performance.

A third study which has implications for increasing our understanding of how participation operates in the appraisal interview setting was conducted by Metcalfe (1984). Metcalfe sought to determine the perceptions and behavior of supervisors and subordinates which distinguish "successful," "average," and "unsuccessful" PAIs. Using a standardized case study, managers were enlisted to role play an appraisal interview as an immediate supervisor of a middle manager who was played by a member of the research team. Managers were told to adopt a

participative approach which emphasized employee development and motivation. The role played interviews were video taped. Immediately following the interview both the supervisor and subordinate filled out a questionnaire which measured feedback characteristics, satisfaction with the interview, satisfaction with the supervisor (subordinate only), and future task motivation (subordinate only). The 78 interviews were then divided into successful, average, and unsuccessful based on the "subordinate's" perceived helpfulness of the interview and future task motivation. The behavioral content of these interviews was analyzed by blind raters to determine the behaviors which distinguished these three categories of interviews. Questionnaire responses not used to create the three categories also served as dependent variables.

Only two perceptual variables distinguished successful, average, and unsuccessful interviews, the perceptions by the "subordinate" of the supervisor's friendliness and the supervisor ending the interview on a positive note. In contrast, a wide range of actual manager behaviors differentiated the successful, average, and unsuccessful interviews. Supervisors conducting successful appraisals invited subordinate participation, were supportive and positive, sought out input from subordinates, listened to subordinates, invited agreement or disagreement with the point under discussion, communicated the principles used to judge performance, and summarized what had transpired in the interview. Supervisors in unsuccessful interviews spent more time expressing opinions and feelings, disagreeing, attacking, giving negative evaluations of the subordinate and his/her performance, and interrupting subordinates.

This study has several methodological weaknesses, including the artificial and reactive nature of role playing, the lack of nonperceptual performance

measures, and the use of members of the research team as subordinates. However, this study does make a valuable contribution to research in this area because it is one of the few studies which has examined both perceptions of the PAI and behavior occurring during the PAI. As this study suggests, greater attention needs to be paid to both perceptions and behavior to achieve a full understanding of how individuals react to PAIs.

A more structured approach to participation is to have the subordinate prepare a self-evaluation and open the interview by presenting it. This practice guarantees that an upward flow of information occurs. In one of the few studies of this approach, Bassett and Meyer (1968) compared supervisor and subordinate reactions to appraisal in which only supervisor assessments were used to interviews in which subordinates' self-appraisals were utilized. The results of this study indicated that: (1) the self-appraisal interviews were rated as more satisfying and constructive by supervisors than traditional appraisal interviews, (2) there was less subordinate defensiveness in the self-appraisal interviews (as rated by the experimenters from interviews with the supervisor and subordinate), (3) subordinates in self-appraisal interviews showed greater performance improvements as rated by their supervisors, and (4) low-rated subordinates were especially likely to show performance improvements, as rated by supervisors, following self-appraisal interviews. DeGregorio, Fisher, and Fields (1985) found that PAIs based on self appraisal were rated as more accurate and satisfying to subordinates than non-participative PAIs, but that explicit self appraisal was not superior to simple participation on these variables.

Self appraisal may not be equally pleasing to all subordinates. Both Basset and Meyer (1968) and Hillery and Wexley (1974) found that inexperienced performers preferred to receive directive feedback from their superior rather than attempting to assess themselves. Once performers learn to do the job and understand the performance standards, self appraisal is more attractive. There are several reasons why self-appraisals may function positively in the interview setting. First, self-assessments may increase the upward flow of information. Therefore, self-appraisals may help supervisors learn how their subordinates perceive their job responsibilities and performance on the job, and problems encountered in carrying these job responsibilities. Second, self-appraisals could stimulate employee development by encouraging subordinates to do some systematic thinking about their job and performance. Burke et al. (1978) found that the more time subordinates spent preparing prior to the PAI, the more they were involved in the interview, the more they perceived the supervisor to be helpful and constructive, the more they reported that job problems were cleared up, and the greater the likelihood that future performance goals were set. Furthermore, subordinates who prepared for the PAI were more satisfied with the interview, were more motivated to improve their future performance, and showed more self-rated performance improvements.

Finally, self-appraisals may help clarify, and possibly resolve, differences between supervisors and subordinates regarding job responsibilities and performance. Bassett and Meyer (1968) found that when self-appraisals were used in the PAI, subordinate's and supervisor's ratings of the subordinate's performance showed greater agreement. Similarly, Meyer (1980) found that publicly announced self-appraisals showed greater agreement with supervisor's

rating than private self-appraisals. Examining the use of self-appraisals in the PAI may help to understand why subordinate's and supervisor's ratings of subordinate performance often do not agree. For example, using self-appraisals in the PAI may invoke a common frame of reference in the supervisor and subordinate which leads to greater agreement regarding the subordinate's performance.

Supervisor's Support and Criticism

A related area of research has investigated the effects of supervisor support and criticism during the appraisal interview. Supervisor support is a variable dealing with the extent to which the supervisor is positive, constructive, and accepting of the subordinate during the interview. Typical measures of this variable are "supervisor was helpful and constructive" and "manager gave recognition for good performance". Although loosely defined, supervisor support has been consistently related to positive interview outcomes such as satisfaction with the interview, satisfaction with the supervisor, and motivation to improve future performance (Burke & Wilcox, 1969; Burke et al., 1978; Nemeroff & Wexley, 1979).

One particular aspect of supervisor support is praise. Nemeroff and Wexley (1979) found that praise by a supervisor correlated positively with subordinate satisfaction and motivation to improve performance. In contrast, Kay et al. (1965) found that praise had no effect on interview process and outcome variables. However, subordinates in the latter study tended to perceive the praise as not being offered sincerely by the supervisor. Metcalfe (1984) found that when supervisors behaved in a supportive manner and brought up positive aspects of the subordinate and his/her performance during the interview,

subordinates perceived the interview as more helpful and were motivated to improve future performance. Therefore, support and praise, if presented in an authentic manner, appear to be important features of successful appraisal interviews.

Criticism and threat from the supervisor to the subordinate have generally been found to have a negative impact on the PAI. Greller (1978) obtained a positive relationship between criticism and perceived utility of the interview, but a negative relationship between criticism and subordinate satisfaction. Kay et al. (1965) reported that larger numbers of critical statements by the supervisor during the interview resulted in greater subordinate defensiveness, more negative attitudes toward the supervisor and appraisal system, and less subsequent goal achievement. Burke et al. (1978) found that the greater the threat experienced by the subordinate during the PAI, the less he/she perceived the interview as fair, was satisfied with the interview, looked forward to future reviews, and wanted to improve performance. Finally, Metcalfe (1984) found that when supervisors disagreed, attacked, and offered negative evaluations of the subordinate and his/her performance, subordinates found the interview as less helpful and were less motivated to improve future performance.

Although criticism often elicits negative reactions from subordinates, information that one is not performing at an acceptable level is necessary before further performance improvements can occur. Therefore, an important question is how supervisors can present negative information in the interview without arousing negative reactions from subordinates. Previous studies suggest that negative reactions can be minimized by conveying both positive and negative feedback during the interview (Fletcher, 1973; Stone et al., 1984), focusing on

subordinate performance rather than personality, providing specific descriptive feedback as opposed to evaluative feedback (Hom et al., 1982; Jacobs et al., 1973), and allowing subordinates to express their feelings (Landy et al., 1978).

In summary, the results from the studies summarized in this section reveal that how the interview is conducted is an important determinant of how subordinates react to the PAI. Future research in this area would likely benefit by proceeding in several directions. First, more effort needs to be directed at developing and testing frameworks which explain why and under what conditions supportiveness and participation are most effective. The research by Kanfer et al. (1986) provides a framework which might be a useful starting point for this type of research. Within such a framework, the provision of downward information from the supervisor would appear to be most useful to newer employees and operate in two related and potentially additive ways: (1) cognitively, through increasing the subordinate's knowledge of how to perform a given task, and (2) motivationally, by increasing the subordinate's belief that he/she can achieve a given level of performance on the task. The latter motivational component of providing downward information would probably involve the use of praise and other supportive behavior by the supervisor. Through the provision of downward information, the subordinate would gradually develop the knowledge and motivation to accomplish the main tasks of a given job. At this point, allowing greater upward flow of information from the experienced subordinate to the supervisor would be advantageous because the subordinate would be able to add information that the supervisor lacks.

Second, more attention needs to be paid to the factors which moderate the effectiveness of the use of participation and/or supportiveness in the PAI. The

previously discussed studies have shown the importance of characteristics of the subordinate (e.g., tenure) and the supervisor-subordinate relationship (e.g., trust, day-to-day interactions) in this regard. In addition, characteristics of the supervisor (e.g., need for power, need for control) are likely to be important. As Metcalfe (1984) has shown, when supervisors are instructed to act participatively they may display a range of behaviors from highly critical and threatening to highly supportive and participative. These differences are likely to be related to the supervisor's general day-to-day supervisory style, which also provides a background for subordinates to interpret the supervisor's behavior in the PAI.

Finally, given subordinates' reactions to receiving negative information in the PAI, more research needs to be done on how to present negative feedback to subordinates. For example, the job design literature has concluded that task feedback is an enriching and desirable job characteristic. However, no research has investigated whether negative task feedback produces similar dysfunctional reactions as found with negative feedback from supervisors. If it does not, perhaps task sources of feedback can be made more salient, alleviating the need for superiors to emphasize negative feedback.

When the supervisor does need to convey negative feedback, it seems that inviting self appraisal against clear goals or standards might be the least threatening approach. If a subordinate can be induced to raise the issue of a performance weakness, he/she probably will be less likely to become defensive than if the superior had raised the issue (Bassett & Meyer, 1968). Further, the superior will not have to spend time documenting and persuading the subordinate

that poor performance has occurred, but will instead be able to take the role of coach in helping the subordinate resolve the performance problem which he or she has brought up.

Summary Recommendations

Based upon the above research, suggestions can be made as to how an ideal appraisal and feedback system could be structured. First, it would seem desirable to have a pre-performance meeting in which the superior and subordinate reach an understanding of exactly how future performance will be assessed. If rating scales will be used, the meaning of each dimension and anchor point should be clarified. This process will make the subordinate more aware of the superior's specific expectations as well as assuring that common assessment standards will be applied by both parties. In jobs for which goal setting is feasible, the pre-performance meeting should result in participatively set, clearly stated, and challenging performance goals.

A second function of the pre-performance meeting should be to set up a performance monitoring system to assure that good data are available for assessment. The parties should agree on which sources of feedback (peers, subordinates, clients) are to be utilized, and the superior should arrange to gather input from these sources at appropriate times. Further, the superior should commit him/herself to carefully collect and record performance data, perhaps by keeping a critical incident diary. Finally, a self assessment guide should be developed to encourage the subordinate to keep track of performance

and goal accomplishment. Such self-monitoring will keep goals salient and trigger frequent comparison, a step which seems necessary in order to motivate corrective action.

During the interval between the pre-performance meeting and the assessment meeting, frequent informal feedback and coaching should be supplied by the superior. This will help to assure that the subordinate is not surprised at the assessment meeting and will allow the subordinate to learn from and correct errors immediately. Further, these informal discussions of specific incidents will allow the subordinate to communicate his or her view of the situation to the superior. Differences in attributions can be more openly discussed and resolved for these single performance incidents that for overall performance during the rating period.

The length of the assessment period should depend on the nature of the job, the time span for which goals can reasonably be set, and the performance level of the subordinate, suggested by Cummings and Schwab (1973). At the assessment meeting, the subordinate should begin with a self-appraisal. The superior might aid by asking questions focusing the subordinate's attention on particular areas or incidents of performance. Second, the superior should share the feedback collected from other relevant sources as well as his or her own perceptions. Using a supportive and participative style, the superior should then move to the third phase of the meeting, that of problem solving. During this stage the parties discuss how the subordinate might be able to do things differently, or what additional support the superior might provide, in order to improve performance in the next period. Finally, new goals for the upcoming period are discussed and agreed upon.

The system can be varied somewhat to allow for specific circumstances. For instance, new employees and poor performers may need more direction, less participation, and more frequent meetings. New employees in particular may not feel competent to assess their own work. At the other extreme, highly experienced employees may resent frequent monitoring by the superior and may prefer to be left alone to pursue their goals. The danger of diverging standards and perceptions of performance must be weighed against the reactance which may be caused by monitoring and frequent performance discussions. For most employees, however, a highly participative system based on clear and common standards should work quite well. Wexley, Singh, and Yukl (1973) found that more participative PAIs were preferred by all subordinates, regardless of their need for independence or level of authoritarianism.

The obvious drawbacks of the recommended system are the larger amount of time to be devoted to performance appraisal and discussion, and the amount of interpersonal skill required of the supervisor. However, the pay off in terms of increased performance, greater organizational commitment, and enhanced perceptions of appraisal system fairness suggest that a good performance appraisal and feedback system can have high utility for the organization.

References

- Annett, J. (1969). Feedback and human behavior. Baltimore, MD: Penguin.
- Arvey, R.D. & Jones, A.P. (1985). The use of discipline in organizational settings: A framework for future research. In L.L. Cummings and B.M. Staw (eds.) Research in Organizational Behavior Volume 7, Greenwich, CT: JAI Press, 367-408.
- Ashford, S.J. & Cummings, L.L. (1983). Feedback as an individual resource: Personal strategies of creating information. Organizational Behavior and Human Performance, 32, 370-398.
- Bandura, A. (1977). Toward a unifying theory of behavioral change. Psychological Review, 84, 191-215.
- Bassett, G.A. & Meyer, H.H. (1968). Performance appraisal based on self-review. Personnel Psychology, 21, 421-430.
- Beer, M. (1981). Performance appraisal: Dilemmas and possibilities. Organizational Dynamics, Winter, 24-36.
- Bernstein, B.L. & Lecomte, C. (1979). Supervisory-type feedback effects: Feedback discrepancy level, trainee psychological differentiation, and immediate responses. Journal of Counseling Psychology, 26, 295-303.
- Bradley, G.W. (1978). Self-serving biases in the attribution process: A reexamination of the fact or fiction question. Journal of Personality and Social Psychology, 36, 56-71.
- Brehm, S.S. & Brehm, J.W. (1981). Psychological reactance: A theory of freedom and control, New York: Academic Press.
- Burke, R.H., Weitzel, W., & Weir, T. Characteristics of effective employee performance review and development interviews: Replication and extension. Personnel Psychology, 31, 903-919.
- Burke, R.J., & Wilcox, D.S. (1978). Effects of different patterns and degrees of openness in superior-subordinate communication on subordinate job satisfaction. Academy of Management Journal, 12, 319-326.
- Campion, M.A. & Lord, R.G. (1982). A control-system conceptualization of the goal-setting and changing process. Organizational Behavior and Human Performance, 30, 265-287.
- Carver, C.S. & Scheier, M.F. (1981). Attention and self-regulation: A control-theory approach to human behavior. New York: Springer-Verlag.

- Chhokar, J.S. & Wallin, J.A. (1984). A field study of the effect of feedback frequency on performance. Journal of Applied Psychology, 69, 524-530.
- Cummings, L.L. (1973). A field experiment study of the effects of two performance appraisal systems. Personnel Psychology, 26, 489-502.
- Cummings, L.O.L. & Schwab, D.P. (1973). Performance in organizations: Determinants and appraisal. Glenview, IL: Scott, Foresman and Company.
- DeCotiis, T. & Petit, A. (1978). The performance appraisal process: A model and some testable propositions. Academy of Management Review, 3, 635-646.
- DeGregorio, M.B., Fisher, C.D., & Fields, M. (1985). Reactions to varying forms of participation in the appraisal interview. TR-ONR-3, Texas A&M University, October.
- DeNisi, A.S., Randolph, W.A., & Blencoe, A.G. (1983). Potential problems with peer feedback. Academy of Management Journal, 26, 457-464.
- Dipboye, R.L. & de Pontbriand, R. (1981). Correlates of employee reactions to performance appraisal systems. Journal of Applied Psychology, 66, 248-251.
- Dornbusch, S.M. & Scott, W.R. (1975). Evaluation and the exercise of authority. San Francisco: Josey-Bass.
- Dossett, D.L. & Trimble, S.K. (1985). The relationship of expectancy theory, goals and formal goal discussion to private goal commitment and performance. Presented at the Annual Meeting of the Southern Management Association, Orlando, FL, November.
- Earley, P.C. & Kanfer, R. (1985). The influence of component participation and role models on goal acceptance, goal satisfaction, and performance. Organizational Behavior and Human Decision Processes, 36, 378-390.
- Erez, M. (1977). Feedback: A necessary condition for the goal setting-performance relationship. Journal of Applied Psychology, 62, 624-627.
- Erez, M., Earley, P.C., & Hulin, C. (1985). The impact of participation upon goal acceptance: A two-step model. Academy of Management Journal, 28, 50-66.
- Erez, M. & Zidon, I. (1984). Effect of goal acceptance on the relationship of goal difficulty to performance. Journal of Applied Psychology, 69, 69-78.
- Fisher, C.D. (1979). Transmission of positive and negative feedback to subordinates: A laboratory investigation. Journal of Applied Psychology, 64, 533-540.
- Fisher, C.D. & Thomas, J. (1982). The other face of performance appraisal. Human Resources Management, 21, 24-26.

Fletcher, C.A. (1973). Interview style and the effectiveness of appraisal. Occupational Psychology, 47, 225-230.

Fletcher, C. & Williams, R. (1976). The influence of performance feedback in appraisal interviews. Journal of Occupational Psychology, 49, 75-83.

Folger, R. (1977). Distributive and procedural justice: Combined impact of "voice" and improvement on experienced inequity. Journal of Personality and Social Psychology, 35, 108-119.

French, J.R.P. Jr., Kay, E., & Meyer, H.H. (1966). Participation and the appraisal system. Human Relations, 19, 3-20.

Green, S.G., & Mitchell, T.R. (1979). Attributional processes of leaders in leader-member interactions. Organizational Behavior and Human Performance, 23, 429-458.

Greller, M.M. (1978). The nature of subordinate participation in the appraisal interview. Academy of Management Journal, 21, 646-658.

Greller, M.M. (1980). Evaluation of feedback sources as a function of role and organizational level. Journal of Applied Psychology, 65, 24-27.

Greller, M.M. & Herald, D.M. (1975). Sources of feedback: A preliminary investigation. Organizational Behavior and Human Performance, 13, 244-256.

Hanser, L.W., & Muchinsky, P.M. (1978). Work as an information environment. Organizational Behavior and Human Performance, 21, 47-60.

Herold, D.M. & Parsons, C.K. (1985). Assessing the feedback environment in work organizations: Development of the job feedback survey. Journal of Applied Psychology, 70, 290-305.

Hillery, J.M. & Wexley, K.N. (1974). Participation effects in appraisal interviews conducted in a training situation. Journal of Applied Psychology, 59, 168-171.

Hom, P.W., DeNisi, A.S., Kinicki, A.J., & Bannister, B.D. (1982). Effectiveness of performance feedback from behaviorally anchored rating scales. Journal of Applied Psychology, 67, 568-576.

Ilgen, D.R., Fisher, C.D., & Taylor, M.S. (1979). Consequences of individual feedback on behavior in organizations. Journal of Applied Psychology, 64, 349-371.

Ilgen, D.R. & Hamstra, B.W. (1972). Performance satisfaction as a function of the difference between expected and reported performance at five levels of reported performance. Organizational Behavior and Human Performance, 7, 359-370.

- Ilgen, D.R. & Knowlton, W.A. Jr. (1980). Performance attributional effects on feedback from superiors. Organizational Behavior and Human Performance, 25, 441-456.
- Ilgen, D.R., Mitchell, T.R., & Frederickson, J.W. (1981). Poor performers: Supervisors' and subordinates' response. Organizational Behavior and Human Performance, 27, 386-410.
- Ilgen, D.R., Peterson, R.B., Martin, B.A., & Boeschen, D.A. (1981). Supervisor and subordinate reactions to performance appraisal sessions. Organizational Behavior and Human Performance, 28, 311-330.
- Ivancevich, J.M. (1980). A longitudinal study of behavioral expectation scales: Attitudes and performance. Journal of Applied Psychology, 65, 139-146.
- Ivancevich, J.M. (1982). Subordinate's reactions to performance appraisal interviews: A test of feedback and goal setting techniques. Journal of Applied Psychology, 67, 581-587.
- Ivancevich, J.M. & McMahon, J.T. (1982). The effects of goal setting, external feedback, and self generated feedback on outcome variables: A field experiment. Academy of Management Journal, 25, 359-372.
- Jackson, S.E. & Zedeck, S. (1982). Explaining performance variability: Contributions of goal setting, task characteristics, and evaluative contexts. Journal of Applied Psychology, 67, 759-768.
- Jacoby, J., Mazursky, D., Troutman, T., & Kuss A. (1984). When feedback is ignored: Disutility of outcome feedback. Journal of Applied Psychology, 69, 531-545.
- Jacobs, M., Jacobs, A., Feldman, G., & Cavior, N. (1973). Feedback II - the credibility gap: Delivery of positive and negative emotional and behavior feedback in groups. Journal of Consulting and Clinical Psychology, 41, 215-223.
- Kane, J.S. & Lawler, E.E. III (1979). Performance appraisal effectiveness: Its assessment and determinants. B.M. Staw (Ed.) Research in organizational behavior volume 1, Greenwich, CT: JAI Press.
- Kanfer, R., Sawyer, J.P., Earley, C., and Lind, A. (1986). Fairness and participation in evaluation procedures: Effects on task attitudes and performance. Social justice review, in press.
- Kay, E., Meyer, H.H. & French, J.R.P. (1965). Effects of threat in a performance appraisal interview. Journal of Applied Psychology, 49, 311-317.
- Keeley, M. (1978). A contingency framework for performance evaluation. Academy of Management Review, 3, 428-438.

Kim, J.S. (1984). Effect of behavior plus outcome goal setting and feedback on employee satisfaction and performance. Academy of Management Journal, 27, 139-149.

Kim, J.S. & Schuler, R.S. (1979). The nature of the task as a moderator of the relationship between extrinsic feedback and employee responses. Academy of Management Journal, 22, 157-162.

Komaki, J., Barwick, K.D., & Scott, L.R. (1978). A behavioral approach to occupational safety: Pinpointing and reinforcing safe performance in a food manufacturing plant. Journal of Applied Psychology, 63, 434-445.

Komaki, J., Heinzmann, A.T., & Lawson, L. (1980). Effect of training and feedback: Component analysis of a behavioral safety program. Journal of Applied Psychology, 65, 261-270.

Landy, F.J. & Farr, J.L. (1980). Performance rating. Psychological Bulletin, 87, 72-107.

Landy, F.J. & Trumbo, D. (1980). Psychology of work behavior. Homewood, IL: Dorsey.

Landy, F.J., Barnes, J.L., & Murphy, K.R. (1978). Correlates of perceived fairness and accuracy of performance evaluation. Journal of Applied Psychology, 63, 751-754.

Larson, J.R. Jr. (1986). Supervisor's performance feedback to subordinates: The impact of subordinate performance valence and outcome dependence. Organizational Behavior and Human Decision Processes, 37, 391-408.

Larson, J.R. Jr. (1984). The performance feedback process: A preliminary model. Organizational Behavior and Human Performance, 33, 42-76.

Latham, G.P., Mitchell, T.R., & Dossett, D.I. (1978). Importance of participative goal setting and anticipated rewards on goal difficulty and job performance. Journal of Applied Psychology, 63, 163-171.

Latham, G.P. & Saari, L.M. (1979). The application of social learning theory to training supervisors through behavior modeling. Journal of Applied Psychology, 64, 239-246.

Latham, G.P. & Wexley, K.N. (1981). Increasing productivity through performance appraisal. Reading, MA: Addison-Wesley.

Lawler, E.E. III (1971). Pay and organizational effectiveness: A psychological view. New York: McGraw-Hill.

Lawler, E.E. III, Mohrman, A.M. Jr., & Resnick, S.M. (1984). Performance appraisal revisited. Organizational Dynamics, 20-35.

- Lazer, R.I. & Wilkstrom, W.S. (1977). Appraising managerial performance: Current practices and future directions. New York: The Conference Board, Inc.
- Liden, R.C. & Mitchell, T.R. (1985). Reactions to feedback: The role of attributions. Academy of Management Journal, 28, 291-308.
- Locke, E.A. (1968). Toward a theory of task performance and incentives. Organizational Behavior and Human Performance, 3, 157-189.
- Locke, E.A., Frederick, E., Lee, C., & Bobko, P. (1984). Effect of self-efficacy, goals, and task strategies on task performance. Journal of Applied Psychology, 69, 241-251.
- Locke, E.A., Mento, A.J., & Katcher, B.C. (1978). The interaction of ability and motivatin in performance: An exploration of the meaning of moderators. Personnel Psychology, 31, 269-280.
- Locke, E.A. & Schweigen, D.M. (1979). Participation in decision-making: One more look. In B.M. Staw (Ed.) Research in Organizational Behavior Volume I, Greenwich, CT: JAI Press, 265-339.
- Locke, E.A., Shaw, K.M., Saari, L.M., & Latham, G.P. (1978). Goal setting and task performance: 1969-1980. Psychological Bulletin, 90, 125-152.
- Matsui, T., Okada, A., & Inoshita, O. (1983). Mechanism of feedback affecting task performance. Organizational Behavior and Human Performance, 31, 114-122.
- McConkie, M.L. (1979). A clarification of the goal-setting and appraisal process in MBO. Academy of Management Review, 4, 29-40.
- McFillen, J.M. (1978). Supervisory power as an influence in supervisor-subordinate relations. Academy of Management Journal, 21, 419-433.
- McGregor, D. (1957). An uneasy look at performance appraisal. Harvard Business Review, 35, 89-94.
- Metcalfe, B.A. (1984). Microskills of leadership: A detailed analysis of the behaviors of managers in appraisal interview. In J.G. Hunt, D.M. Hosking, C.A. Schriesheim, and R. Stewart (Eds.), Leaders and Managers (pp. 179-199). New York: Pergamon.
- Meyer, H.H. (1980). Self-appraisal of job performance. Personnel Psychology, 33, 291-295.
- Meyer, H.H., Kay, E., & French, J. (1965). Split roles in performance appraisal. Harvard Business Review, 43, 123-129.
- Mitchell, T.R. & Kalb, L.S. (1981). Effects of outcome knowledge and outcome valence on supervisor's evaluations. Journal of Applied Psychology, 66, 604-612.

Mitchell, T.R. & Kalb, L.S. (1982). Effects of job experience on supervisor attributions for a subordinate's poor performance. Journal of Applied Psychology, 67, 181-188.

Mitchell, T.R. & Wood, R.E. (1980). Supervisor's response to subordinate poor performance: A test of an attribution model. Organizational Behavior and Human Performance, 25, 123-138.

Mohrman, A. & Lawler, E. (1983). Motivation and performance appraisal behavior. In F. Landy, S. Zedeck & J. Cleveland (Eds.) Performance measurement and theory, Hillsdale, NJ: Erlbaum.

Mount, M.K. (1983). Comparisons of managerial and employee satisfaction with a performance appraisal system. Personnel Psychology, 36, 99-110.

Morran, D.K. & Stockton, R.A. (1980). Effect of self-concept on group member reception of positive and negative feedback. Journal of Counseling Psychology, 27, 260-267.

Nemeroff, W.F. & Wexley, K.N. (1979). An exploration of the relationships between performance feedback interview characteristics and interview outcomes as perceived by managers and subordinates. Journal of Occupational Psychology, 52, 25-34.

O'Reilly, C. & Anderson, J. (1980). Trust and the communication of performance appraisal information: The effects of feedback on performance and job satisfaction. Human Communication Research, 6, 290-298.

Pavett, C.M. (1983). Evaluation of the impact of feedback on performance and motivation. Human Relations, 36, 641-654.

Pearce, Jone L. Porter, Lyman W. (1986). Employee responses to formal performance appraisal feedback. Journal of Applied Psychology, 71, 211-218.

Pooyan, A., O'Connor, E.J., Peters, L.H., Quick, J.C., Jones, N.D., & Kulisch, A. (1982). Supervisory/subordinate differences in perceptions of performance constraints: Barriers are in the eye of the beholder. Proceedings of the Annual Convention of the Southwest Academy of Management, 170-174.

Prince, J.B. & Lawler, E.E. III (1986). Does salary discussion hurt the developmental performance appraisal? Organizational Behavior and Human Performance, 37, 357-375.

Pryor, J.B., Gibbons, F.X., Wicklund, R.A., Fazio, R.H., & Hood, R. (1977). Self-focused attention and self-report. Journal of Personality, 45, 514-527.

Regan, D.T., Straus, E., & Fazio, R. (1974). Liking and the attribution process. Journal of Experimental and Social Psychology, 10, 385-397.

Regan, D.T. & Totten, J. (1975). Empathy and attribution: Turning observers into actors. Journal of Personality and Social Psychology, 32, 850-856.

Ross, L. (1977). The intuitive psychologist and his shortcoming: Distortions in the attribution process. In L. Berkowitz (Ed.) Advances in experimental social psychology: Vol. 10. New York: Academic Press.

Salancik, G.R. (1977). Commitment and the control of organizational behavior and belief. In B.M. Staw and G.R. Salancik (Eds.) New directions in organizational behavior. Chicago: St. Clair Press, pp. 1-54.

Scheier, M.F. & Carver, C.S. (1983). Self-directed attention and the comparison of self with standards. Journal of Experimental and Social Psychology, 19, 205-222.

Schlenker, B.R. (1980). Impression management: The self concept, social identity, and interpersonal relations. Monterey, CA: Brooks/Cole.

Silverman, S.B. & Wexley, K.N. (1984). Reaction of employees to performance appraisal interviews as a function of their participation in rating scale development. Personnel Psychology, 37, 703-710.

Snyder, C.R. & Shenkel, R.J. (1976). Effects of favorability, modality, and relevance on acceptance of general personality interpretations prior to and after receiving diagnostic feedback. Journal of Consulting and Clinical Psychology, 44, 34-41.

Stone, D.L., Gueutal, H.G., & MacIntosh, B. (1984). The effect of feedback sequence and expertise of rater on perceived feedback accuracy. Personnel Psychology, 37, 487-506.

Stone, D.L. & Stone, E.F. (1985). The effects of feedback constituency and feedback favorability on self-perceived task competence and perceived feedback accuracy. Organizational Behavior and Human Decision Processes, 36, 167-185.

Stone, E.F. & Stone, D.L. (1984). The effects of multiple sources of performance feedback and feedback favorability on self-perceived task competence and perceived feedback accuracy. Journal of Management, 10, 371-378.

Strang, H.R., Lawrence, E.C., & Fowler, P.C. (1978). Effects of assigned goal level and knowledge of results on arithmetic computation: A laboratory study. Journal of Applied Psychology, 63, 446-450.

Stickland, L.H. (1958). Surveillance and trust. Journal of Personality, 26, 200-215.

Taylor, M.S. (1981). The effects of feedback consistency: One test of a model. Paper presented at the National Academy of Management Meeting, San Diego.

Taylor, M.S., Fisher, C.D., & Ilgen, D.R. (1984). Individual's reactions to performance feedback in organizations: A control theory perspective. In K.M. Rowland and G.R. Ferris (Eds.) Research in personnel and human resource managment: Vol. 2 Greenwich, CT: JAI Press, Inc., 81-124.

Wexley, K.N., Singh, J.P., & Yukl, G.A. (1973). Subordinate personality as a moderator of the effects of participation in three types of appraisal interviews. Journal of Applied Psychology, 58, 54-59.

White, S.E., Mitchell, T.R., & Bell, C.H. Jr. (1977). Goal setting, evaluation apprehension, and social cues as determinants of job performance and job satisfaction in a simulated organization. Journal of Applied Psychology, 62, 665-673.

Wood, R.E. & Mitchell, T.R. (1981). Manager behavior in a social context: The impact of impression management on attributions and disciplinary actions. Organizational Behavior and Human Performance, 28, 356-378.

Manpower, Personnel, and Training R&D Program

Director of Research Programs
Office of Naval Research (Code 11)
Arlington, VA 22217-5000

Technical Director
NPRDC (Code 01)
San Diego, CA 92152-6800

Chairman, MPT R&D Planning Committee
Office of the Chief of Naval Research
Code 222
Arlington, VA 22217-5000

Director, Manpower and Personnel
Laboratory
NPRDC (Code 06)
San Diego, CA 92152-6800

Life Sciences Technology Program
Manager (Code 125)
Office of the Chief of Naval Research
Arlington, VA 22217-5000

Department of Administrative Sciences
Naval Postgraduate School (Code 54Ea)
Monterey, CA 93943-5100

Defense Technical Information Center
DTIC/DDA-2
Cameron Station, Building 5
Alexandria, VA 22314

Program Director
Manpower Research & Advisory Services
Smithsonian Institution
801 North Pitt Street
Alexandria, VA 22314

Science and Technology Division
Library of Congress
Washington, DC 20540

Staff Specialist for Training
and Personnel Systems Technology
Office of the Under Secretary of
Defense for Research and Engineering
3D129, The Pentagon
Washington, DC 20301-3080

Office of the Assistant Secretary of
the Navy (Manpower & Reserve Affairs)
5D800, The Pentagon
Washington, DC 20350-1000

Team Head, Manpower, Personnel, and
Training Section
Office of the CNO (Op-914D)
4A578, The Pentagon
Washington, DC 20350-1000

Technical Director
U.S. Army Research Institute for the
Behavioral and Social Sciences
5001 Eisenhower Avenue
Alexandria, VA 22333

Assistant for Research, Development
and Studies
Office of the DNCO(MPT) (Op-01B7)
Department of the Navy
Washington, DC 20370

Dr. Benjamin Schneider
Department of Psychology
University of Maryland
College Park, MD 20742

Headquarters U.S. Marine Corps
Code MPI-20
Washington, DC 20380

Dr. Albert S. Glickman
Department of Psychology
Old Dominion University
Norfolk, VA 23508

Head, Leadership & Command
Effectiveness Branch (N-62F)
Naval Military Personnel Command
Department of the Navy
Washington, DC 20370-5620

Prof. Bernard M. Bass
School of Management
University Center at Binghamton
State U. of New York
Binghamton, NY 13901

Head, Human Factors Laboratory
Naval Training Systems Center (Code 71)
Orlando, FL 32813-7100

Library
Naval War College
Newport, RI 02940

Page 2

Manpower, Personnel, and Training R&D Program

Lt. Col. Les Petty
NMCE
Headquarters, USMC
Washington, DC 20380

Col. Hester
NMPE
Headquarters, USMC
Washington, DC 20380

END

8-87

DTIC